

Listening to Kentucky High Schools

Photo by Rick McComb, Kentucky Department of Education



**Why Some
High Schools
Miss, Meet,
and Exceed
Predicted
Postsecondary
Outcomes**

By
Michal Smith-Mello

KENTUCKY
LONG-TERM POLICY RESEARCH CENTER

Listening to Kentucky High Schools

Why Some High Schools Miss, Meet, and
Exceed Predicted Postsecondary Outcomes

by
Michal Smith-Mello
with
Michael T. Childress, Billie M. Sebastian,
Corrie Orthober, Jennifer Bobbitt,
Tom Hampton, and Suzanne King

KENTUCKY
LONG-TERM POLICY RESEARCH CENTER

Published By:

KENTUCKY
LONG-TERM POLICY RESEARCH CENTER

111 St. James Court
Frankfort, Kentucky 40601-8486
www.kltprc.net

2002

Library of Congress Control Number:

printed with state funds
available in alternative formats upon request

KENTUCKY

LONG-TERM POLICY RESEARCH CENTER

BOARD OF DIRECTORS

Betty Griffin, Chair
James R. Ramsey, Vice Chair

EXECUTIVE BRANCH

Diane Hancock
Mary E. Lassiter
Donna B. Moloney

LEGISLATIVE BRANCH

Sen. Tom Buford
Sen. Alice Forgy Kerr
Rep. “Gippy” Graham
Rep. Steve Nunn

AT-LARGE MEMBERS

Evelyn Boone
Ron Carson
Paul B. Cook
Daniel Hall
Jennifer M. Headdy
Sheila Crist Kruzner
Penny Miller
Robert Sexton
Alayne L. White

EXECUTIVE DIRECTOR

Michael T. Childress

The Kentucky Long-Term Policy Research Center is governed by a 21-member board of directors, including four appointees from the executive branch, six from the legislative branch, and eleven at-large members representing organizations, universities, local governments, and the private sector. From the at-large component of the board, six members are appointed by the Governor and five by the Legislative Research Commission. In accordance with its authorizing legislation, the Center is attached to the legislative branch of Kentucky state government.

Preface

As part of its mission to advise and inform the Governor, the General Assembly, and the public about the long-term implications of trends and policies, the Kentucky Long-Term Policy Research Center completes a three-volume exploration of higher education with this report. In light of the Commonwealth's goal of increasing postsecondary enrollment by 50 percent over the next 20 years, the Center has reported on a cost-benefit analysis of some of the social benefits of higher education and the results of a survey of high school students. Here, we report on findings from case studies of four Kentucky high schools that were selected based upon the relationship of postsecondary outcomes predicted by a comprehensive data analysis and actual college-going rates. From this look at the experiences, the programs, and the personalities of these schools, we glean insight into some of the intangible ingredients that cannot be captured in a quantitative analysis, the stuff that helps make high schools work. From policymakers at every level to ordinary citizens of the Commonwealth, all who are interested in and concerned about improving the Commonwealth's educational status will find this report of interest.

KENTUCKY

LONG-TERM POLICY RESEARCH CENTER

The Kentucky Long-Term Policy Research Center was created by the General Assembly in 1992 to bring a broader context to the decisionmaking process. The Center's mission is to illuminate the long-range implications of current policies, emerging issues, and trends influencing the Commonwealth's future. The Center has a responsibility to identify and study issues of long-term significance to the Commonwealth and to serve as a mechanism for coordinating resources and groups to focus on long-range planning. Michael T. Childress serves as the Executive Director of the Kentucky Long-Term Policy Research Center. For further information, log on to the Center's website at: www.kltprc.net; write to the Center at 111 St. James Court, Frankfort, Kentucky, 40601-8486; phone 502-564-2851 or, outside of Frankfort, 800-853-2851; or e-mail info@kltprc.net.

Contents

Preface.....	v
Figures	ix
Tables	xi
Summary.....	xiii
Acknowledgments	xix
Introduction	1
Selection Criteria	3
Profiles of Case Study Schools.....	7
A Comparative Analysis	17
Action Items	57
Appendix A	69
Appendix B.....	73

Figures

Figure 1: Percent of College-Going Graduates, Case Study High Schools, State Average, 1993-98	4
Figure 2: Percentage Point Difference Between Actual and Predicted College-Going Rates at Case Study Schools, 1998	5
Figure 3: <i>Who most influenced plans for your future after high school?</i>	33
Figure 4: Percentage of Students Eligible for Free and Reduced Lunch.....	37
Figure 5: Per Pupil Spending at Case Study High Schools, 1999-2000	46

Tables

Table S.1: Factors Influencing Postsecondary Outcomes	xv
Table 1: Factors Influencing Postsecondary Outcomes	54
Table A.1: Model Estimates	72
Table B.1: Summary Data (Averages) on High Schools.....	74
Table B.2: Summary Data from Teacher Transcript Analysis	75

Summary

Why do some high schools send more graduates to college than others? Theories abound: better educated parents, higher levels of income, more dollars spent per student, smaller classes, smaller schools, more experienced, better educated teachers, more counselors, and the presence of influential friends or role models to name only a few. Most of these have been shown to correlate well with postsecondary attendance. Yet some high schools send a large portion of their graduates to college when conventional wisdom suggests they should not, and others, which by all measures should have many of their graduates in college, fail miserably. Clearly, other, perhaps intangible, factors are at work.



To learn more about what those factors might be, the Kentucky Long-Term Policy Research Center constructed a statistical model that considered a wide range of factors generally accepted as predicting education beyond high school and applied it to Kentucky's high schools. It then compared the model's predictions with actual postsecondary education outcomes. Some schools performed as predicted. More interestingly, some did not. Researchers selected four schools that either did far better, far worse, or about as predicted for more intensive study. The goal of the examination was to identify those influences that caused these schools to depart from the model predictions.

The Schools We Studied

Researchers selected four schools for intensive follow-up study. Two of them did much worse than the model predicted; that is, they sent far fewer graduates on to college in 1998 than the model predicted. One performed precisely as the model predicted, and one did much better, sending more of its graduates to college (17 percentage points) than the model anticipated. We labeled these schools A, B, C and D, and the letter grades roughly approximate our assessment of their overall performance (not just how they did in sending graduates on to college).

High School A. This school is located in a county of relatively small towns. The area is a mix of relatively small towns and rural areas and principally offers economic opportunities in blue-collar jobs. Demographic data suggest that the more educated members of the community tend to move away. This school has the largest, poorest, and most racially diverse population of the four. As is consistent with these characteristics, the school has the highest dropout rate in the group, and its ninth graders register the lowest scores on the CTBS-5, the National Basic Skills test used in Kentucky. This information implies that the school is doing a poor job. However, as our grade of A suggests, that is not the case. The intangibles present here result in an extraordinary percentage of this school's graduates pursuing college. The school has a new leadership team and a relatively young faculty. It has established innovative programs, has pursued them with energy, and the results are obvious. From the well-maintained appearance of the school to the clear understanding of the benefits of and obstacles to going to college on the part of its students, the efforts of the leaders and faculty are readily apparent.

High School B. This school performed exactly as the model predicted it should. Its students come mainly from rural areas. The student body is overwhelmingly white and predominantly working class, although it has a sizeable number of poor and low-income students. The area's economy is in transition as manufacturing jobs have dwindled, as major employers have left or downsized dramatically. As a result, the local employment picture is not rosy, which probably contributes to the high fraction of the high school students going on to college and to their eventual decision to leave the area. The school has able leadership, dedicated guidance counselors, and the most experienced faculty of the four schools. The physical appearance of the school belies its many strengths. Much of it is aging and dismal, suggesting neither pride nor commitment. But the students generally perform well on the Kentucky Core Content Tests, scoring above average in every area but math. They do not do well on the CTBS-5 test, with fewer than half performing at or above the U.S. average. The dropout rate is slightly below the state average.

High School C. This school is located in a completely rural area. The population of the school's home county has the largest percentage of the four studied without high school degrees, and it has the largest portion of the population living in poverty. However, the student body is more affluent than that of High School A. In spite of its once strong agricultural base, employment opportunities in the county are now quite bleak, but ample employment opportunities lie within easy commuting distance. The faculty is the least experienced of the four studied, and the building is old and dilapidated, due to limited resources. In this case, however, initial appearances deceive. The school has a cohesive and supportive atmosphere with many of the attributes of a close family. Faculty and leaders are involved. Teachers have decorated their individual classrooms, often footing the bill for improvements. The principal is

deeply involved in the school and has established good rapport with faculty and students alike.

High School D. High School D is located in the state's urban triangle, but its character ranges from urban to rural. The school is largely racially homogeneous but economically diverse though it tends to draw many of its students from one of the poorest parts of the county. However, the economic situation is relatively good, as low-skill jobs are readily available. The school's home county has the smallest fraction of people living in poverty, a characteristic that carries into the high school. That said, a substantial percentage of its students qualifies for free lunches. Interestingly enough, even though the median income level is the highest of the four areas studied, it has the lowest fraction of college-educated citizens. The school faculty is relatively senior. The school is among the newest in the case study group but it is physically unattractive, suggesting a lack of pride. This impression is accurate. Lack of trust, contempt, and resentment characterize relations between the principal and staff. Given the problems with leadership found, it is unsurprising that by and large the culture of the school seems to be one of resignation.

How the Schools Compare

Researchers visited each school and assessed a number of characteristics. Those that seem to be most influential and illustrate the disparities among schools most clearly appear in the first column of Table S.1 along with the ratings given for each area in the form of a plus or a minus depending on how the factor influenced the school. Some characteristics have both signs, indicating a mixed influence. The first sign indicates the most influential one.

TABLE S.1 Factors Influencing Postsecondary Outcomes				
	High School			
	A	B	C	D
Leadership/Management Style	+	-/+	+	-
Culture	+	-	+	-
External Cultural/Economic Factors	+	+	-/+	-
Communications	+	-/+	+	-
Guidance Counseling	+	+	+	-
Individual Grade Plans	+	-	-	-
Defying Effects of Poverty and Undereducation	+	+	-	-
Programmatic Support	+	+	-	-
School Spending	-	+	-	+
Paid Employment	-	-	-	-
Social Capital	+	+/-	+/-	-

The table contains a myriad of messages, but some of the most important ones can be derived from the ratings for High School A, which received a plus in every area but two, spending per student and paid employment. However, even the two minus ratings only highlight the success of this school. It spends the least per student, yet has the highest success in sending its students on to college. It even succeeds in the areas where conventional wisdom holds that money matters: appearance and facilities. Although it spends about 20 percent less per student than does High School D, it is a far more appealing and attractive school. Paid employment, the other area receiving a minus, refers to students holding down jobs, a common circumstance particularly for juniors and seniors. Many of High School A's students work at local businesses, which provide the school valuable support but also appear to expect an uninterrupted



source of cheap labor. Typically students put in between 15 and 30 hours per week, but some have what equates to full-time jobs. The jobs divert their attention from study and other traditional school activities. That notwithstanding, the school seems to overcome this negative.

High School D marks the other end of the spectrum, scoring a minus in every area save one, school spending. But the school seems to get far less for its money. In spite of the relatively modern facility, its appearance is stark and institutional, and even though it reports networked classrooms and a low student-to-computer ratio, students do not appear to have ready access to computers or to be using them much, and teachers report that equipment is outdated. Moreover, teachers complain of large class sizes.

The message of the table is clear: intangibles such as leadership, culture, and communication can more than make up for such tangible measures as spending per student, poverty, and undereducated parents. This is not to say that these latter influences do not matter because they do. All other things being equal, innovative, caring leadership and a dedicated faculty will do better with more resources and students who do not have to struggle economically. But as High School A demonstrates, dedicated professionals can overcome such obstacles.

Action Items

The analysis of these four schools provides a rich catalogue of lessons. Not all are positive. Our analysis shows that leadership is critical, but it can work for good or ill. The challenge of motivating a young person to be the first in his or her family to go to college is difficult. Adding bad or even mediocre high school leadership into the mix makes a tough job even tougher. By contrast, superb leadership can overcome even the most daunting odds. With these thoughts in mind, we suggest that legislators, educators, community and business leaders, local officials, and parents find ways to implement the following action items in their respective venues.

- ***Focus on Leader Development.*** Given the dramatic influence leaders have on virtually everything that goes on in schools, investment in developing good leadership qualities would seem to be time and money well spent.
- ***Expand Support for Programs to Improve Academic Performance.*** We found some excellent programs with key attributes that can be readily adapted to other programs: liaison with middle schools and colleges, peer tutoring and counseling, rapid intervention, and freshman orientation and training in study skills. A comprehensive approach, such as that found at High School A, appears most desirable.
- ***Invest in At-Risk Students.*** Boosting the state's percentage of those who go on to college will require paying attention to those least likely to succeed: students with poor reading skills and home environments that interfere with their schooling. Actions include interventions by counselors and social workers, visits to colleges, and, most importantly, positive reinforcement that helps instill in students a belief that they can succeed.
- ***Improve Accountability Measures and Reporting.*** Accountability measures for schools need to give more weight to what happens after students leave high school. A narrow focus on CATS scores does not help in this regard. Both students and educators recognize that these do not mean much for their futures. Current measures such as School Report Cards could be improved to provide more and better information.
- ***Reconsider, Restructure Incentives.*** One way of getting more students to go to college would be to provide incentives to do that. As mentioned, students have little incentive to perform well on CATS tests, yet the skills these tests measure have a lot to do with continuing education after high school. One approach would be to tie the level of reward of the KEES scholarship to CATS performance rather than to grades and performance on the ACT.
- ***Make Information Sharing Integral to Professional and Institutional Development.*** Sharing information about what works and what does not can play an important role in increasing the numbers of stu-

dents who go on to college. The institutionalization of routine exchanges of information within and among schools would be beneficial.

- ***Consider Statewide Standards for Guidance Counselors.*** Our data suggest that guidance counselors have too much to do and that too much of what they do does not relate to their core skill of counseling. Since many children form their attitudes and expectations about college early, informed counseling at every grade level is important. While more research is needed to determine what works best, steps that would seem to merit consideration include such things as establishing manageable student-to-counselor ratios and timelines to achieve them, relieving counselors from such unrelated duties as hall monitoring, and training counselors to work with the academically troubled student as effectively as they do the likely college-bound.

- ***Further Examine the Effects of Paid Employment.*** Many students juggle extraordinary schedules that frequently relegate education to a low place on their list of priorities. While work can cultivate habits important later in life, it can also foreclose opportunities for deeper educational experience and social maturity. Indeed, some seniors seem to use it as a way to avoid more demanding studies. One useful step would be to ensure employers comply with child labor laws and to educate parents and students about these laws. Additional research into how work affects the underachieving and the at-risk would also be beneficial.

- ***Foster Wider World Views.*** Not aggressively promoting a wider world view fosters a narrow one by default. Exposure to new ideas, opportunities, and places imbues young people with the desire to explore them and the confidence that they can. Many young people are conditioned by the histories of their parents and the attitudes and expectations of those around them. Breaking out of the mold requires them to know what else is possible and to believe that they can achieve it. Programs that broaden their horizons, such as visits to colleges and cultural events, are one way to break this self-limiting cycle.

The Kentucky Education Reform Act (KERA) has set a high standard for the state, one that some argue cannot be met given the inherent obstacles posed by poor and undereducated populations that have no tradition of valuing education. Yet some schools beat the odds. And more of them will succeed if we can transplant lessons learned from those that already have.

Acknowledgments

While they will remain anonymous, we would like to thank the principals of the schools we examine here for their permission to conduct these case studies and their gracious accommodation of our many requests for information and for scheduled time with students, teachers, and other personnel. Regardless of our assessment of the performance of individual schools, their personnel were consistently open and cooperative and, frankly, eager to learn from the experience.

We would also like to thank Dr. Melissa Evans-Andris, a professor in the Department of Sociology at the University of Louisville who previously served as Director of Research for the Kentucky Department of Education (KDE), and Dr. Stephen Clements, an assistant professor in the Department of Educational Policy Studies and Evaluation at the University of Kentucky, for their early guidance in helping our agency determine how best to select schools for study. We also wish to thank our Board member, Dr. Robert Sexton, Executive Director of the Prichard Committee, for his willingness to offer suggestions and recommendations both on school selection criteria and areas for exploration. We're also grateful to Dr. Gordon Davies, President of the Council on Post-secondary Education (CPE); Dr. Sue Moore, Executive Vice President of CPE; and their colleague and our Board member and former Chair, Ron Carson, for data, guidance, ideas, recommendations, and several opportunities to present our early findings prior to publication.

We also wish to thank our valued editor Jerry Sollinger, who wrote the executive summary and provided his usual and considerable expertise in editing and proofreading this document.

We extend our gratitude and appreciation to photographer Rick McComb and the Kentucky Department of Education for their permission to use the photographs you will find throughout the text and on the cover. Rick's fine photography has not only made this a more attractive and appealing publication but also one that gives the reader another window into the classrooms of Kentucky high schools.

Finally, while many individuals contributed to the content and structure of this report, the authors assume full responsibility for its content.

Introduction

This report is the third in a series by the Kentucky Long-Term Policy Research Center designed to increase understanding of the benefits of higher education to Kentucky and to discover some of the levers that will enable the Commonwealth to achieve the ambitious long-term goals for postsecondary attendance established by the Council on Postsecondary Education. Dramatically increased postsecondary enrollment and graduation rates as well as the realization of other goals related to the education status of our state will be key to the Commonwealth's ability to reduce poverty, improve quality of life, increase incomes relative to the nation as a whole, and broaden access to prosperity.

Here, we report findings from case studies of four Kentucky high schools with very different geographic, demographic, and cultural profiles, and, importantly for our purposes, postsecondary



outcomes. Our work on these case studies began in 2000 in conjunction with the development and execution of a statewide survey of high school-age youth. As a foundation for this work, the Kentucky Long-Term Policy Research Center developed a database on Kentucky high schools with the goal of predicting postsecondary outcomes, specifically, the percentage of students from a given high school who should be expected to attend college.

As we detail in the subsequent discussion of methodology and in an appendix, we used this analysis to identify schools that were suitable candidates for more detailed qualitative examination. The schools were selected for study based upon the relationship between their actual postsecondary outcomes and our quantitative predictions of their performance as well as other, lesser criteria. Specifically, we selected four schools, two of which were underperforming, one of which was performing as predicted, and one that was performing well beyond the outcomes predicted by our multiple regression analysis. Based upon private interviews with principals, teachers, guidance counselors, and students, these case studies profile and compare the experiences of these schools in an effort to discover more about the intangibles that come into play in the achievements of some schools and the shortcomings of others.

2 Listening to Kentucky High Schools

With our 2001 report, *Talking Back: Kentucky High School Students and Their Future Education Plans*, an analysis conducted by the University of Kentucky Policy Analysis Center for Kentucky Education, we presented our findings from the individual level, based upon our survey of high school-age students. With this report, we closely examine selected high schools, their leadership and culture, the attitudes professionals and students bring into the environment, the programmatic support schools offer, and other dynamics that appear to play a role in the success of high schools, that is, the percentage of students who go on to college relative to the myriad factors that influence this outcome. In short, we sought to learn more about why some schools do better than expected while others fall well short of expectations.

What follows is, first, a brief discussion of the quantitative methodology used in selecting these schools for study, followed by profiles of the four high schools we examined, a comparative analysis of their strengths and weaknesses, and action items that may offer opportunities for community and school leaders, as well as education policymakers, to achieve higher rates of postsecondary attendance and success among Kentucky's traditional college students, recent high school graduates. Two appendices provide technical information about the data analysis used to select these schools and about an analysis of teacher transcripts conducted to identify any possible links between the academic credentials or backgrounds of teachers and school performance.

While these case studies lead us to recommend additional research in a number of areas, they clearly reveal some of the qualities and characteristics that foster or undermine the performance of high schools in regard to postsecondary outcomes. Indeed, they tell us a great deal about the intangibles that enable some high schools to do a far better job of encouraging and enabling young people to pursue postsecondary education than others. Combined, the Center's reports offer a compelling case for the value of higher education at the individual and the larger social level (see *Education and the Common Good*) and, through these case studies and our survey of high school students, an enriched understanding of what our commitment to an improved future may ultimately require of the Commonwealth.

Selection Criteria

The four schools selected as subjects of the case studies presented here were identified by a multiple regression analysis designed to predict postsecondary attendance rates for the state's public high schools.¹ The analysis included data on factors that studies have linked to higher rates of college attendance. For example, we controlled for the percentage of students who are eligible for free and reduced lunches, a proxy for poverty; urban or rural designations; district-level per pupil expenditures; the size of the school; and the portion of the county's population with a bachelor's degree or higher.

Based on a comparison of predicted to actual postsecondary attendance rates, the four schools chosen for study were found to have overperformed, performed as expected, or underperformed in 1998. The postsecondary attendance rates we use here are from the 1998 "Transition to Adult Life" reports to the Kentucky Department of Education's Office of Assessment and Accountability. Our database also includes such data as county unemployment rates and the entire body of data from School Report Cards, which includes school performance on standardized national and state tests, average years of teacher experience, dropout rates, etc.



In selecting sites for study, we also chose to vary subjects by region and by urban and rural classification. Some of the schools chosen for study are located in counties that are designated as metropolitan by the U.S. Bureau of the Census and the U.S. Department of Agriculture, but the character of all these counties, like the vast majority in the state, is not classically urban. One high school is located in a county that is strictly rural; that is, it has no municipalities with a population of 2,500 or more. In terms of size, the larger schools had 1998 graduating classes between 200 and 300 students, but the rural school had a substantially smaller student body.

We purposefully excluded certain classifications of schools as possible study sites. On the recommendation of staff of the Kentucky Department of

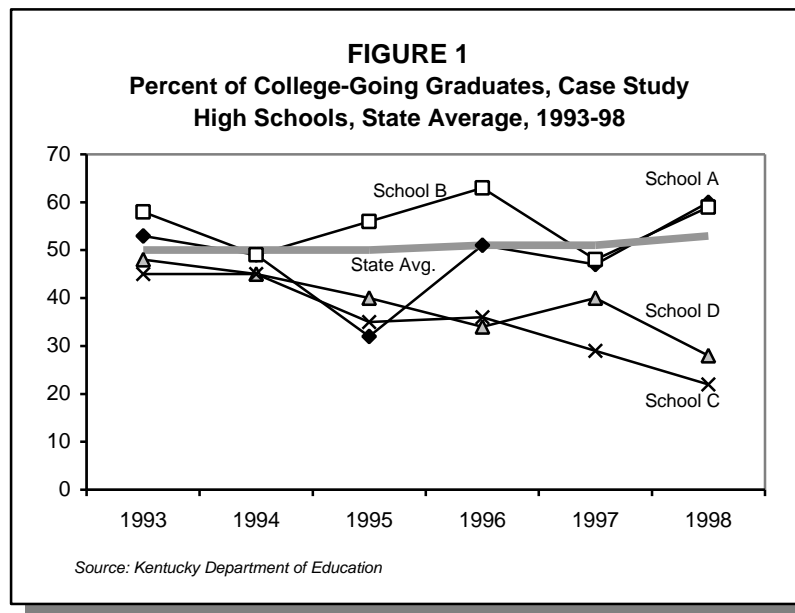
¹ Refer to Appendix A for a complete explanation of the method and presentation of the model results.

4 Listening to Kentucky High Schools

Education, we excluded independent, magnet, or traditional schools because it is believed that the socioeconomic characteristics of the student bodies in these schools and thus their overall performance is likely to be skewed. Likewise, we chose not to include alternative schools, which clearly do not represent typical high schools.

It is important to note that these case studies focus only on the immediate postsecondary outcomes for graduates of these high schools. They do not examine critically important rates of college persistence, which are quite low in Kentucky. Here we focus only on the choices students report having made in the year following graduation from high school. Some research, however, shows that these postsecondary choices are highly predictive. That is, students who do not opt to go to college immediately after graduation from high school are far less likely to attend college.

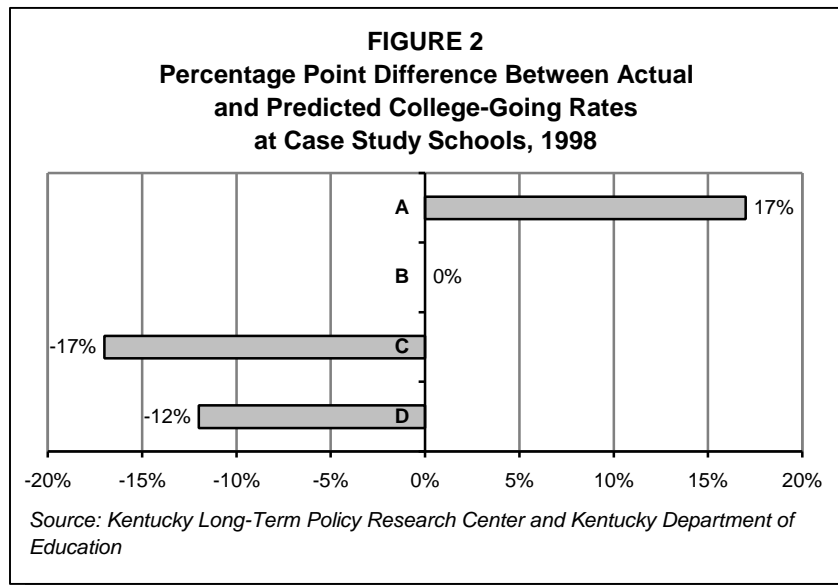
The findings of these case studies also suggest that circumstances in a high school can change rapidly given the quality of leadership, external economic forces, and possibly, as one principal suggested, the character or personality of the graduating class. Figure 1 illustrates the degree to which postsecondary outcomes at these schools have deviated from the state average on a year-to-year basis between 1993 and 1998 though they have been trending sharply away from the state average in more recent years. All of these schools have experienced changes in leadership since the 1998 data on outcomes were collected and, thus, have clearly been in transition. For all but one of these schools, new leadership appears to have made a positive difference, bringing



new energy into the school and altering some of the circumstances that existed when these postsecondary attendance rates were reported and refining others. While we found readily identifiable strengths and weaknesses at each high school, we also found many potential strengths and significant promise at one of the high schools at the lower end of the spectrum of both predicted and actual postsecondary attendance rates.

To preserve privacy, we have labeled the schools High Schools A, B, C, and D. The letter grades we have assigned these schools reflect our ranking of their performance. As shown in Figure 1, however, High School B historically has had a higher rate of postsecondary college attendance than High School A though, by 1998, college attendance rates were slightly below those of High School A. Its achievements, however, simply meet, rather than exceed, expectations based upon our predictive criteria. While a credit in itself, the +17 percentage point difference between predicted and actual outcomes as shown in Figure 2 and our case study findings suggest that High School A may have considerably greater strengths.

Conversely, we find a wider negative gap, -17 percentage points compared with -12 percentage points, between the predicted postsecondary college attendance rates and the actual rates at High School C rather than High School D. Here, however, our case study findings led us to conclude that High School C has far greater strengths and is likely to become more successful in the years ahead. Our case study found that this small, relatively underfunded school had stronger leadership, a far more positive culture, a dedicated faculty, and considerable social capital to draw upon within the school and from the small,



6 Listening to Kentucky High Schools

close-knit community where it is located. Further, the school has undergone important changes since the data on graduation rates were collected. In short, High School C appears to have many of the ingredients to succeed while High School D, by its own staff's assessments, appears headed down a self-fulfilling track of low expectations.

Profiles of Case Study Schools

High School A

As shown in Figure 1, High School B actually sent a higher percentage of its graduating seniors on to college than High School A for many years, but our qualitative and our quantitative analyses conclude that High School A is performing well beyond its expected capacity. The 1998 rate of college attendance was 40 percent higher than our predicted rate in spite of a number of demographic factors that are ordinarily associated with low rates of college attendance. What's more, our case studies found that the school excels in a number of areas that are difficult to capture quantitatively.

High School A is located in a county where most of the population resides in relatively small towns. Population trends have essentially followed those of the state, growing significantly during the 1970s but only modestly in the 1980s and into the 1990s. While many young families appear to be present, a significant portion of the population migrated from the county during the 1990s. School leaders believe many young people choose to leave the county because it offers limited economic opportunities. They characterized the local economy as being fairly stagnant and principally blue collar.

As predicted by our model, we found that the limited economic opportunities available in the community may motivate young people to pursue postsecondary education as a path out of the county. That



many of the teachers and guidance counselors at this high school are natives of the immediate area, if not the county where the school is located, suggests that, were opportunities available, more would likely stay or return upon completing their education. Nevertheless, many high school students told interviewers that they wanted to leave the county. So, in many respects, this county typifies the state's recent and troubling demographic and cultural experience, in that it has

experienced prolonged losses to net out-migration and its youth do not tend to foresee a future in their home community due to limited economic opportunity.

Many social and economic circumstances in this county mirror the state as a whole. Poverty rates for the county in 1995 were only slightly lower than the state average for all persons, but per capita income was well below the state average of \$22,183 in 1998. Just as the state's industrial profile is atypical for the nation, so too is the county's. An even larger share than the state's 19 percent of the labor force is concentrated in manufacturing. About a quarter of the county's labor force works in wholesale and retail trade, and a slightly smaller segment of the labor force is employed in services. The average weekly wage in these industries, however, trails the state average by more than \$50 a week, and the state average has historically been lower than the national average in virtually every industry.

The county's blue collar industrial profile is not one that draws more educated people. While the portion of the county's 1990 population that were high school graduates was larger than the state average, the population of college graduates was lower. Thus, these data combined with population trends suggest that educational achievement is rising in this county, but, like the state as a whole, many of its most educated citizens move elsewhere.

Significantly, the student body of High School A is the largest, the poorest, and the most racially diverse in the case study group, socioeconomic factors often associated with lower academic performance, high dropout rates, and poor postsecondary outcomes.² Its student body includes roughly 200 more students than High School B, and nearly half of students at the school qualify for free and reduced lunch, a higher rate than at any of the schools we studied. As studies suggest it would, High School A has the highest dropout rate in this study group. Moreover, its ninth graders register the lowest scores on the National Basic Skills test used in Kentucky, the CTBS-5. Its recent performance on the Kentucky Core Content Tests also ranks above only that of High School D. Nevertheless, the intangibles at this school, differences that demographic and test data do not reveal, are considerable. We believe these factors are precisely what encourages an extraordinary percentage of this relatively disadvantaged student body to pursue college after high school.

Ironically, on the surface, High School A appears to be the richest school in the study group, but it spends the least per student. From its clean, well-maintained, inviting appearance to its diverse student population, High School A looks and feels like a remarkable school. Though the school's physical

² See, for example, Deborah J. Wilds, *Seventeenth Annual Status Report on Minorities in Higher Education* (Washington, D.C.: American Council on Education, 2000); Patricia McDonough, *Choosing Colleges: How Social Class and Schools Structure Opportunity* (State University of New York Press, 1997); Laurence Steinberg, *Beyond the Classroom: Why School Reform Has Failed and What Parents Need to Do* (New York: Touchstone, 1996); and Gail E. Thomas, Karl Alexander, and Bruce Eckland, "Access to Higher Education: The Importance of Race, Sex, Social Class, and Academic Credentials," *School Review* (1979) 133-156.

structure is similar in age to High School D and part of B, its bright, inviting halls, offices, library, and classrooms shine in comparison.

Here, we also found a relatively new and very strong leadership team that has invested significant time, energy, and resources in creating a welcoming, supportive environment for students as well as working to elevate the academic performance and perceptions of students. The leadership team appeared consistently positive, proactive, and focused on the well-being of students. The staff gave the distinct and consistent impression that it had high but realistic expectations for all students.

Through an array of extracurricular activities, inventive exercises, informal mentoring, and a strong guidance counseling program, this school appears to be highly effective at educating students about their postsecondary options and encouraging pursuit of higher education. In classroom interviews, these students offered the most realistic and accurate assessments we found of the cost of college, the benefits of higher education, and the obstacles to college attendance. Though standardized test scores suggest that students from High School A do not emerge from high school with superior academic skills, in all likelihood a product of the deficits they bring to their high school career, the school appears to adhere to a fundamental tenet of the Kentucky Educational Reform Act—all students can learn and succeed. Certainly, a remarkable percentage of these young people are giving college a try, a step that this school environment appears to encourage strongly.

Given the aging of Kentucky's teaching force, this is a relatively youthful faculty. Teachers at High School A are slightly less experienced than those at High School B and D and only slightly more experienced than the faculty at our sole rural school, which has difficulty recruiting teachers and administrators to the small town where it is located. The relative youth of this faculty and the positive working environment they appear to enjoy may be an important factor, but we have too little information on which to base this conclusion. Furthermore, the case of High School B suggests that highly experienced faculty may encourage higher performance.

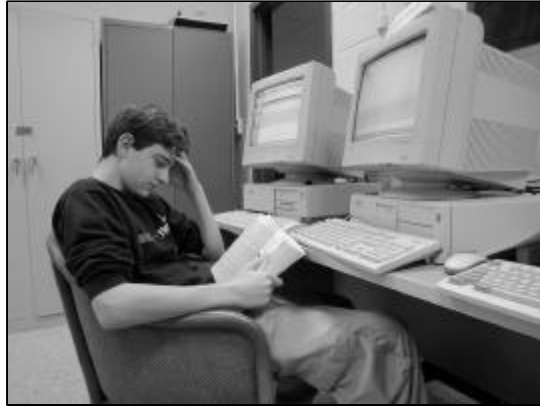
High School B

We found that High School B performed exactly at the level our analysis predicted based on socioeconomic and school performance variables. A little more than half of its students reported going on to college in 1998. However, in spite of some remarkable efforts and a high level of spending per student, this school simply meets, rather than exceeds, expectations.

High School B serves a largely rural student body in a county that has steadily lost population in recent years due to net out-migration. Part of what has propelled many people away from this county during past years has been an economy in transition. The county's manufacturing base has lost a signifi-

cant number of jobs over the past two decades. Unemployment rates have remained consistently above the state average in recent years, so the county continues to struggle to regain its economic footing. Per capita income, however, ranks in the top quarter for counties in Kentucky, and it is higher than in any of the other counties where we examined schools. However, we found the second highest percentage of students who qualify for free and reduced lunches at High School B. Thus, the highest performing schools among those in the case study group are the most economically disadvantaged.

Because the industrial makeup of the county has changed considerably in recent years, earnings have eroded. Wholesale and retail trade and services have become the dominant industries in this county, each employing nearly twice as many people as a once-strong manufacturing sector. Nevertheless, average weekly wages in services are higher than the state average while those



in wholesale and retail trade are below the state average for the industry. Average weekly wages for the declining manufacturing labor force of this county are higher than the state average, but jobs are more scarce.

Once a place where blue collar jobs provided high earnings to many, the county has weathered difficult change. For

many families, job losses have meant significant losses in income, a factor that may be a key impetus behind the school's stable postsecondary attendance rates. Many students appear to have learned difficult but valuable lessons from the experiences of families and friends. "Most are going to college because they've finally faced the grim reality that they can't make a living here," one teacher observed. "About half feel they will have to leave to make a living ... there's nothing here."

In 1990, data suggest that young people in the county were choosing to become more educated than the general population. The percentage of persons age 18 to 24 who held an associate degree or had some college in 1990 was three times higher than the percentage of the county's adult population age 18 and older with the same educational background. But the percentage of the population with a bachelor's degree or higher was lower in 1990 than the state average. As in the county where High School A is located, more educated citizens typically leave the county.

High School B has a number of assets, including a bright, capable new principal; committed and highly motivated guidance counselors; some clearly

dedicated teachers; resources that permit the district and the school to spend the most per student in this case study group; the most experienced teaching staff in the group; and many intangible benefits that arise from the considerable social capital found at the school.

But High School B does not look like a success story. Classrooms of varying sizes are located in an aging section of the building that was sometimes uncomfortably warm, sometimes uncomfortably cold, sometimes cramped, and sometimes quite spacious, depending on when the classrooms were constructed. While a newer addition houses offices and a gymnasium, and a nearby vocational/technical school is modern and inviting, the main building where most students spend most of their time is not. Halls are poorly lit, institutionally drab, and generally unappealing. Outside, the grounds closest to the classrooms were sometimes littered with old desks and other debris. In the older, larger section of the building where students spend much of their day in classrooms and the cafeteria, conditions are less than optimum. Doors have been removed from dilapidated, dirty, graffiti-marred restrooms, a circumstance about which students harbor significant resentment.

While some classrooms have been cheerfully decorated by teachers who have created very pleasant spaces, the overall atmosphere of this school was generally unpleasant. Unlike High School A, its overall impression does not reflect pride or commitment to creating an appealing environment for young people. Many students complained about the facility, about dirt, cockroaches, the conditions of the classrooms and restrooms, and the general inattention to cleanliness and maintenance. Even casual observation suggests that these complaints are not unfounded.

Teachers at High School B are the most experienced in our study group. Several members of the faculty reported being near retirement age. Thus, teacher experience may be an important factor in this high-performing school's makeup, permitting it to draw on the considerable personal resources these veteran teachers have to offer. Some were clearly dedicated teachers who were making a remarkable difference. Interestingly, a number of teachers attended this high school, suggesting that the intangible of social capital, of shared histories, values, and attachment to place, may translate into a strong commitment to the well-being of students and the performance of the school.

High School B's student population is overwhelmingly white and predominantly working class though it has a sizeable contingent of poor and low-income students. Students at this high school are performing above average on the Kentucky Core Content Tests in every subject area but math. But High School B's ninth graders do not fare well on the CTBS-5. Fewer than half of them perform at or above the level of the average U.S. student. The dropout rate is slightly below the state average.

High School C

We rate High School C ahead of High School D, even though the gap between High School D's performance and our predictive analysis is not as wide (see Figure 2) as that for High School C. The qualitative differences between these two schools, however, were remarkable.

High School C is located in a rural farm county. Nevertheless, the county's population grew at a higher rate than the state as a whole during the 1990s; however, the growth is almost exclusively a product of the gradual suburbanization of neighboring counties. A very small percentage of the county's population growth can be attributed to increased birth rates, so young families are not a dominant presence.

Compared to the other three counties in our case studies, High School C's home county has the largest percentage of persons who have not completed high school. Similarly, only the county in which High School D is located has a lower percentage of college-educated population, and both are well below the state average. In 1998, per capita income in the county was only slightly higher than in the county where High School A is located and well below the state average. In 1995, this county had the highest percentage of people living in poverty in our study group, a larger portion than the state average. However, compared to the study group, the school's student body is more affluent than that of our high-performing and performing-as-expected schools, A and B, as substantially larger portions of those student bodies are eligible for free and reduced lunches. It is likely that this agricultural community has an aging, undereducated population that influences its overall profile, as well as its welcoming culture.

Though this county numbers among a few in the state that are being severely affected by the declining tobacco quota, employment opportunities are within commuting reach. Indeed, readily available, entry-level jobs in adjacent counties may be adversely affecting postsecondary attendance. Though this school has considerable strengths, the changing nature of the local economy and the demands of the larger state, national, and global economies suggest that High School C will have to dedicate more attention to encouraging and supporting postsecondary attendance. In 1998, the percentage of students from High School C who went on to college after high school was substantially lower than our analysis predicted.

While a number of colleges are well within commuting distance, no satellites are located in the county. As a consequence, these students do not appear to identify with any specific institution of higher education, a circumstance that may subtly influence postsecondary decisionmaking. Students at High School C, on the other hand, reported plans to go to various institutions in the vicinity, depending upon financial aid packages and individual goals, but none expressed a sense of connection to any of the institutions located within commuting distance.

Teachers at High School C are the least experienced among those in the study group, a profile that likely became more pronounced after our site visits, as two veteran teachers with more than 25 years of experience retired at the end of the 2000 term. The relatively new principal of this school reported that she had already fired two new hires after a year of less than satisfactory performance, signaling her intention to cultivate a quality teaching force in spite of the difficulty of recruiting to this rural county.

Much of High School C's physical plant is old, having undergone expansion in the past that has now aged significantly. The building is fairly dilapidated and physically uninviting, a circumstance that quickly becomes inconsequential in the family-like atmosphere found here. Most teachers have gone to great lengths to decorate their rooms at their own expense to create a more appealing environment in the aging facility. These rooms are like oases that strongly suggest deep commitment to this school and its students. The only negative student comments were in regards to the condition of the building. When students offered these opinions, however, they were quick to point out the plans for a new building and describe the positive effects on morale they believe it will have, signaling a strong sense of student ownership. Plans are in the works for a new school that will be built adjacent to the current structure.



A combination of factors appears to have adversely affected this school's performance over the past 10 to 15 years. First and perhaps foremost, the school lacked consistent leadership until the present principal was hired. Over the course of more than 10 years, the school had a new principal virtually every year, and reportedly experienced near anarchy in the year preceding the arrival of its current principal, who has made a long-term commitment to the school and the community. "I couldn't ask for a better place to raise my kids."

In her second year as principal when we conducted our site visits, it was evident that she was liked and respected by these remarkably polite and well-behaved students. "I feel like we have established a climate that has been conducive to learning," she observed and numerous teachers concurred. Clearly, she has also established a strong rapport with students. She appears to know each of them by their first names, as she talks with them in the office, in halls between classes, and in the cafeteria, good-naturedly kidding with them and inquiring about the specifics of their lives. She reported focusing special attention on students who tend to miss a lot of school: "I get a little more personal with them. ... I feel like I know teenagers." What's more, she believes she is

uniquely qualified to lead by example, having overcome considerable odds herself. She reports giving an occasional motivational speech and paying close attention to seniors. "Everyone here has a barrier; they're learning to deal with it instead of using it as an excuse."

She, however, is not optimistic about the school's ability to produce a high percentage of college-going graduates due to the culture of this local farming community. In spite of the considerable social capital that was evident among faculty we interviewed, the principal reports that she was unprepared for the low levels of parental involvement she's found at the school. Virtually no volunteer hours are dedicated by parents, and few serve on the school council or vote in council elections.

The students of this school, however, have the capacity for higher achievement in terms of college attendance. While far from reaching the state's long-term goals, the school ranked in the top 50 in 1999 on the Kentucky Core Content Tests, exceeding the state average in every category except 12th grade writing, an area in which their performance was the same as the state average. In this small case study group, their performance was also superior to the other schools in every category but 12th grade writing. While the performance of ninth graders on the National Basic Skills Test is below the national average in all three categories, it is slightly above the state average in mathematics. Interestingly, a significant portion of these students, double the state average, are required to repeat a grade, suggesting stringent academic requirements. Consequently, significant postsecondary potential is being developed in this school.

The principal's focus, she observes, has been on preparing students for success by elevating expectations, enhancing alternative vocational or technical preparation tracks, beefing up the curriculum, and strengthening the guidance counseling system.

In spite of the important and positive change in leadership this school has undergone, it clearly needs additional resources. As the only principal to more than 500 students, demands on the principal's time are significant. With an average class size of 29 students, teachers are also under stress. Moreover, a lone counselor serves the student body while dividing his time with other duties. To perform at a higher level, this school needs personnel, as well as computers and instructional materials, according to the principal, a circumstance that will require the commitment of additional resources either at the state or the local level. The community has demonstrated its willingness to support its schools, passing a utility tax, but resources are still limited and from appearances inadequate to the challenge this school faces.

High School D

During recent years, High School D's success rate as measured by the percentage of its students who report going on to college, has fluctuated. College attendance rates have trailed the state average for five of the last seven years for which data are available. Indeed, this school has been in steady decline for years in regard to the postsecondary outcomes of its students, only a small percentage of whom go on to college. High School D sent far fewer students to college in 1998 than our regression model predicted it would based on school and socioeconomic data.

High School D is located in a suburban to quite rural county with a growing population that is a product of positive net in-migration as well as increased birth rates. People, including many commuters, are drawn by employment opportunity, affordable housing, and the small-town atmosphere. The county and consequently the high school lack racial diversity. Economic diversity, however, is marked, according to school staff. The school that is the subject of our study reportedly draws its students from the poorest part of the county. One teacher suggested that "tracking by geography" is at work in this school, as the county's poorest citizens tend to live in the area the school serves.

Of the schools in our case study group, however, this county has the smallest percentage of people living in poverty, based on 1995 data. Indeed, this is a relatively affluent county, and the student body is comparatively affluent. Nevertheless, county per capita income is below the state average. High School D, however, ranks in the lower tier among Kentucky high schools in regard to the poverty of its students.³ While substantial, the lowest percentage of students in the study group qualify for free and reduced lunch, half the percentage of those at High School A. In short, the widely held perceptions that faculty and administrators at this school have of acute, widespread poverty are not borne out by the data. Students may be culturally deprived, as faculty comments suggest, but various data suggest that they are not disproportionately economically deprived.

While High School D is located in a county with the highest median household income in our case study group, it has the lowest percentage of college-educated citizens. A higher percentage of this county's population has a high



³ Division of Assessment Implementation, Kentucky Department of Education, "High School CTBs Total Battery Compared to Poverty," 1999.

school diploma than in the completely rural county where High School C is located, but the county has a lower percentage of high school graduates than in High School A and B counties. In spite of the relative affluence of the county, a level of indifference about the far more demanding future on the horizon appears to prevail here. Jobs with local manufacturers who, by the assessments of teachers at the school, seek only “warm bodies,” are readily available. Thus, this local economy provides numerous jobs for uneducated and undereducated young people similar to those held by many of their parents. Without encouragement, which appears scant at this high school, the local economy appears to be yet another force that undermines interest in and commitment to postsecondary education.

Overall, this school has the second most experienced faculty in the study group. The principal, however, reported making a number of new hires in recent years, and one teacher discussed high rates of turnover among faculty at the school.

A Comparative Analysis

These case studies strongly suggest that some factors significantly influence postsecondary outcomes, more specifically college attendance rates. Here we attempt to understand why some schools perform at higher rates than we expect and others fall far short. In light of our quantitative and qualitative analyses, the performance of High School A remains remarkable given the predictive effects of such variables as poverty rates and CATS performance. Significantly, we found that intangible factors, such as the quality of leadership, the culture leaders foster within a school, the programmatic responses to preparing young people for adulthood, and the cumulative strengths of various sources of social capital are critically important.

Here, we discuss factors that came to our attention while conducting these case studies, from the intangible qualities that we concluded were strongly influencing postsecondary outcomes to external, concrete factors that our multiple-regression analysis also suggests are important to postsecondary performance. We begin with a discussion of leadership, which we conclude is the most critical factor, and the marked differences found in the quality of it at these schools. Indeed, based on these case studies, it is the quality of this intangible factor, above all others, that appears to be the most significant influence on postsecondary outcomes, one that we believe explains remarkable performance and gives rise to hope in places where performance historically has been poor. Subsequent discussions of school culture, communications, guidance counseling, and tools such as special programs and individual graduation plans, arguably, are all products of good leadership. We also discuss the external culture, which for some expected and unexpected reasons, exerts an important influence on the decisionmaking of youth. And, because some researchers believe it has had an increasingly detrimental effect on the academic pursuits of high school students, we also explore the consequences of paid employment for students.

Leadership and Management Style

As with any organization, these schools evidence strengths and weaknesses that clearly reflect the quality of their leadership. While we recognize that school boards play a key leadership role, here we focus exclusively on leadership within the schools. Arguably a reflection of the values that school boards bring to the hiring process, the school's appointed and natural leaders, however, are ultimately responsible for creating a positive, supportive learning environment. These case studies suggest that the quality of leadership defined in its broadest and most inclusive sense has a powerful influence on the quality of the educational experience and, in turn, on the likeli-



hood that young people will pursue education beyond high school graduation. Because schools are ultimately workplaces that help shape society's most important product—the men and women of the future—the style of leadership or management appears key to their success.

Many of the management practices advocated by the visionary W. Edwards Deming have now been widely adopted and proven their considerable merit.¹ Rather than the rigidly authoritative management style that had evolved in most U.S. workplaces, Deming, a statistician who advocated the continuous improvement of both product quality and process, believed that to achieve such a desired outcome, it was necessary and desirable to engender the trust and cooperation of all employees and enlist them in the drive to meet mutual goals.² Among other things, Deming asserted that managers must demonstrate constant commitment to the goals of their organization, teach it to all employees, promote continuous learning and self-improvement for all, encourage innovation, and drive fear from their workplaces.³ In the ensuing years following belated U.S. attention to Deming's theories, to which some credit Japan's post-World War II economic rise, an explosion of management literature has emerged, and the authoritarian, centralized, command-and-control model has been displaced in some of the nation's largest and most successful firms, as well as millions of small firms.

¹ The U.S. Department of Labor has published numerous reports and case studies documenting the success of these practices, including a 1995 review by S.C. Mavrinac, N.R. Jones, and M.W. Meyer, which found evidence of significant returns to enterprises that had adopted them.

² W. Edwards Deming, *Out of Crisis* (Cambridge: MIT Press, 1986 reprint).

³ Deming.

That the Kentucky Education Reform Act (KERA) recognized the evolution of management theory is undeniable. Its empowerment of site-based councils, for example, was at least in part based on a recognition that broader parental and community involvement in the decisionmaking process would likely lead to higher levels of performance. Certainly, we found that the more effective these councils were reported to be among the schools in our case study group, the higher the performance of the school. Our lowest performing schools reported having ineffectual site-based councils for which school officials struggled to gain parent participation.

KERA also recognized the importance of setting and achieving high standards and measuring outcomes for which schools should be held accountable. In the years since its enactment, the necessity of providing teachers as well as students with continuous learning opportunities has become an increasingly apparent key to the instructional process. Indeed, a potential early flaw of KERA, by many assessments, was its relative neglect of teacher training or, as Deming's work suggested, the opportunity to learn the new philosophy. Perhaps most importantly, KERA established a core vision for education in Kentucky, asserting the importance of equity among schools as well as the value of achievement among all students. KERA also recognizes and makes provisions for the need to provide guidance and support to schools and students that fall short as well as recognize those which achieve. In short, KERA is firmly grounded in late 20th century management theory. However, the schools it governs, our findings suggest, are not consistently abiding by its vision.

Indeed, we found stark contrasts in this small group of schools though they do not correlate closely with postsecondary outcomes. In two of the schools, we found that the approach to leadership or management appeared to be more focused on discipline and control, rather than on building trust and relationships with students. In these schools, students expressed considerable resentment and anger, appreciably more than at the other two schools. Understandably, to a far lesser extent, a few teachers either exhibited or expressed varying degrees of alienation at these schools. At High School D, however, a teacher and administrative staff members openly expressed concern about leadership and the overall direction of the school, and the principal expressed distrust of the faculty, indicating that they needed to be kept under close observation. Clearly, in the case of High School D, distrust was widespread.

At High School B, discipline also appeared to be a primary focus for the principal, but trust of and among faculty and staff appeared relatively high though there were exceptions. Many students, however, expressed anger and alienation. While we found offsetting evidence of a strong commitment to the welfare of students at this school, the focus on discipline appeared to be a far too consuming focus.

Unquestionably, we found the most consistently visionary, committed, and creative leaders at High School A. The principal and a core of like-minded

formal and informal leaders, including guidance counselors, teachers, the librarian, coaches, family resource center personnel, and others appeared to be having a positive effect at this school. Remarkably, given the size of this school—the largest in the study group—and its diversity—the largest minority student population in the study group—the principal was poised, consistently positive, and proactive. Indeed, he seemed relaxed and comfortable in the role of team leader, and it was evident that the welfare of students was the primary objective of the school.

While High School A had taken important steps to protect students, adopting the recommendations of a safety consultant who recommended some precautionary physical changes at the school, its focus on discipline was secondary, even tertiary, compared to academics. The principal, who is experienced but relatively new to the school, and a number of other natural leaders in the school appeared warm, relaxed, and nonthreatening in their dealings with students. The impression was consistently one of a team of caring people who worked together to serve students. Personnel frequently and spontaneously offered positive remarks about the school.

Students, for the most part, mirrored the positive impressions we had of leadership. While relatively poor performers on standardized tests, the students at High School A appear to differ from those at High Schools B and D primarily in attitude. Students were future-oriented, realistic in their goals, knowledgeable about their options, and motivated to build careers. They appeared to enjoy good relationships with principals, guidance counselors, and members of the faculty. They were not without criticism of poor teachers, those whom they believed did not care about their well-being, but they praised many teachers highly. Students appeared to enjoy close relationships with several members of the faculty, some of whom recounted many of the troubles and transitions they had seen these young people through. The Family Resource Center also appeared to be an important oasis for students where they could find caring, compassionate guidance and help with a range of needs. Clearly, this staff had worked to make a difference in the lives of these young people.

In fact, the leadership team at High School A appeared dedicated to creating a place where students would want to be. Remarkably, music designed to appeal to a range of tastes, from country and western to rap, is sometimes played in the cafeteria during lunch periods. The principal reported that he found it had a calming effect on students. Aside from that, it clearly gave the impression that this space, as well as the rest of the school, belonged to students, a far different impression than was found at High Schools B and D where it seemed that too few people were genuinely concerned about the interests of students.

As with each of these schools, the principal of High School B was relatively new to his post, obviously quite bright, thoughtful, and very talented, but he appeared somewhat detached and overly concerned about discipline. He exhibited no passion for his work. On the days of our site visit, much of the

school appeared to lack warmth and a sense of community. At times, in our interactions with both students and teachers, an us-against-them mentality was evident. Although notable, even remarkable exceptions were found, some teachers appeared quite disinterested in their work. The progress of a lesson plan rather than student comprehension was clearly the concern of one teacher; about 70 percent of her students reported that they were failing the class. Students at every grade level expressed considerable alienation and contempt for teachers and for the school's environment.

High School B's two guidance counselors, however, appeared to be highly committed to their work, functioning as aggressive surrogate parents who prodded students to pursue scholarship opportunities and do the work necessary to gain admission to and financial assistance for college. Importantly, these guidance counselors were handling an extraordinary volume of work given the size of the student body.

Also relatively new, the principal of High School C showed exemplary leadership skills. She expressed a clear vision of where she wanted to take the school and a realistic assessment of the obstacles to be overcome, not the least of which is a local culture that does not value education highly enough, in her opinion. While exhibiting considerable warmth in her engagement with students, she also appeared to be a firm but flexible disciplinarian. The school has a tough attendance policy that requires students to attend Saturday School after three unexcused absences. "We have students that won't graduate because they breached our attendance policy," the school counselor observed. Yet the policy, like the principal, is flexible enough to accommodate the situations some students in this rural county face. High waters in local creeks, for example, often prevent some students from getting to school, and their absences are dealt with differently. The principal's firmness has helped correct the course of a ship that was wandering way off course in the years preceding her arrival, when numerous fights and other disturbances took place. Discipline, by all accounts, has improved dramatically during her tenure, but the sense of a caring community was the overriding impression of this school.

While no music was playing in High School C's cafeteria, the ambience was nevertheless warm and family-like, as students from all grades, teachers, the principal, and cafeteria workers interacted freely. From every angle, this appeared to be a school committed to the well-being of its students, to creating



a welcoming, compassionate, and supportive environment. The mature, positive young people we met there appeared to be flourishing.

Significantly, the principal expressed little tolerance for personnel who were not committed to quality. During her brief tenure, she reported having fired two teachers rather than retain personnel she found inadequate to the challenge. By contrast, she recounted working closely with the school's counselor, who had expressed doubts to her about his abilities in that capacity. In the estimation of one veteran teacher who had seen a dozen principals come and go in nearly as many years, "This one is top-notch. We've had some who didn't have the sense to get out of the rain." Students also give this principal a high rate of approval, referring to her as "great" and "cool," and suggesting she "actually makes a difference." By their assessment, which mirrors our own, she is a dynamic leader who, in all likelihood, will improve this school's profile in the coming years.

Conversely, we found evidence of significant problems with leadership at High School D. Indeed, the difference between this school and the three others in this study group was stark. In private interviews, staff openly criticized the principal. Many expressed doubts and even disdain for the principal's leadership abilities. One staff member observed that the principal "presents a clear lack of understanding for the overall needs, safety, and welfare of this school and its students." On the other hand, the principal expressed distrust of the faculty as well as the students, remarking that it was necessary to monitor teachers closely and reporting that a tough disciplinary policy he had enacted had dramatically reduced infractions at the school. However, staff openly questioned the veracity of his assertions and the effectiveness of his policies. Perhaps as a consequence, this school, more so than any in this case study group, appeared cold and institutional even though the facility was the newest.

Remarkably, when asked to describe programs or activities that the school employed to help students prepare for postsecondary education, the principal at High School D suggested we contact selected teachers and ask them the names and descriptions of programs because he had forgotten the specifics. Overall, this principal appeared to spend a good deal of time in his office or, reportedly, off site. During our time on site, he was not available throughout much of the day. Staff described the principal as being detached and disorganized.

Further, by way of explaining the underperformance of the school, the principal's remarks about students and their parents were consistently negative. He criticized student behavior, values, and limitations, characterizing students as having a "welfare mentality," as being racist and violent, and as tough to deal with. He also characterized parents as uninvolved and uninterested. Ironically, he captured the likely crux of the problem with leadership at his school in describing what makes a good teacher: "Primarily, you have to like kids, and they have to know you like them, and treat them with respect, dignity."

Overall, High School D appeared a dysfunctional educational environment, one where the presumption of failure may be undermining the energy of stu-

dents and faculty alike. Though some of High School D's teachers are clearly dedicated, highly qualified professionals, the internal culture of this school combined with an external culture that devalues education are, in all likelihood, daunting obstacles that stifle the very creativity and energy needed to reverse present circumstances.

Many students at both High Schools B and D voiced resentment about the over emphasis on discipline, but order and discipline appeared to be a central focus at High School D. From the presence of a police officer on site at High School D to a "zero-tolerance" policy to a student handbook that focused almost exclusively on rules and prescribed punishments for violations, this school's culture appeared to be defined by a leader whose approach to running the school is, by his own characterization, militaristic and inflexible.

The responses of students to this seemingly myopic focus on discipline were closely akin to those found by Roberts & Kay, Inc., a Lexington-based consulting firm that conducted focus group sessions with middle and high school students in 1997. They found remarkably similar views among students, regardless of the school's academic profile. Students, the researchers reported, "experience schools as places defined primarily by the search for order and the effort to control students." Principals, they found, are central to this perception, and regardless of whether students viewed these leaders favorably, they did not connect principals to academic performance,⁴ which should presumably be their first priority. In two of the schools examined here, principals themselves appeared to perceive one of their key roles as that of enforcer.

An obvious consequence of leadership that is focused principally on discipline is the dilution of the primary mission of ensuring a high-quality education for all students. With publication of Roberts & Kay's *Turn Up the Volume: the Students Speak Toolkit*, the Partnership for Kentucky Schools acknowledges in a cover letter included with the instructional manual, "Students have been left out of the significant research and policy development in our state."⁵ These case studies suggest that they are being left out in other ways as well, that the energies of many key educational leaders may not only be divided by their attentions to discipline but misdirected.

Broadly, these case studies suggest that leadership skills are sorely needed in some high schools and that concerted efforts to cultivate and sustain them are important to student achievement, the educational process, and post-secondary outcomes. Our findings recommend the cultivation of far more inclusive management or leadership styles that consciously involve students, as well as teachers, parents, and the community at large, in the continuous im-

⁴ Roberts & Kay, Inc., "Students Speak: How Kentucky Middle and High School Students View School," focus group report for the Partnership for Kentucky Schools, 1997, and *Turn Up the Volume: the Students Speak Toolkit* (Lexington: Partnership for Kentucky Schools, 2001).

⁵ Cover letter from Carolyn Witt Jones, Executive Director, Partnership for Kentucky Schools, included in *Turn Up the Volume*.

provement of the educational process and the academic achievement of students. As management theorists and practitioners alike emphasize, leadership is not merely a quality but a *process* of engaging all relevant parties in the work of shaping a vision of a mutually desired future, outlining and continuously refining the goals that must be met to achieve that vision, and inspiring collaborative, innovative work toward their achievement. Ultimately, these case studies suggest, quality leadership is key to the future of postsecondary outcomes in Kentucky.

An educational system with lofty goals such as those we have set forth for the Commonwealth can ill afford to have the formal leaders of schools preoccupied by day-to-day policing. Further, these case studies suggest that extremely rare incidents—school shootings—have made discipline and control, rather than caring and commitment to the well-being of students, far too routine a focus. Indeed, they appear to be the central focus in some schools. From our observations, the alienation this approach engenders may foster the very hostility that some school leaders appear to fear most.

High School Culture

The culture of these schools, like most, is a product of myriad factors, the most powerful of which are external. Parents and family, their values, and their involvement in the lives of students and the school are widely acknowledged to be the most influential factors in young people's lives. However, a school's culture, the way individuals within its environs relate to one another, can positively influence the attitudes of young people and, in many



cases, counter negative influences in the home. Ultimately, the transformation of Kentucky's education status will depend upon its ability to strengthen the positive influences that schools have on young people at critical times in their lives to counter a legacy of devaluing education and, in some cases, the abilities of young people. In short, a fundamental tenet of KERA,

that all students can learn and succeed, must not only be a preeminent goal in schools, but one that the school's culture consistently supports and advances.

Management theorists generally concur that trust, cooperation, and commitment to shared goals characterize the ideal workplace culture. Such a culture is far more likely to yield the energy of new ideas, fresh approaches,

experimentation, and dedication to continuous improvement. Among both educators and students, one would expect a positive culture to engender enthusiasm for learning, instill self-confidence, and encourage exploration. However, these case studies suggest that school reform in Kentucky has not substantively changed the culture of Kentucky high schools.

Yet the lives of today's teenagers have changed dramatically from those of previous generations. Consider, for example, the level of responsibility that high school students now assume for personal finances; the degree of independence many have had to assume throughout their childhoods because both parents work in most households; the ready access that most enjoy to virtually unlimited, often uncensored information; and the social pressures that are fraught with added complexity in a sexually liberated era. In many cases, high school students face these challenges alone. Veteran teachers observed that the increased likelihood of having two working parents has left more young people virtually caring for themselves. "Mom and Dad leave at 6:00 and don't get back till 6:00." Perhaps in an effort to compensate, one team of high school counselors observed that parents today appear unwilling to permit their children to be uncomfortable, to have to work hard for things. "It's easier for the parents to buy the kids off. It's 'I don't have time for you ... let me buy you a car.' " On the other hand, one veteran teacher observed that she found today's young people far more compassionate than their counterparts in the past.

The recent work of the National Commission on the High School Senior Year, headed by Governor Paul Patton, reflects the growing awareness that something is amiss in today's high schools. Indeed, we found that, outside of the presence of computers, yesterday's approaches are still evident in today's high schools. Many of the young people we interviewed expressed alienation from their high school, opinions that are often dismissed as natural adolescent reactions, but the consistency of the complaints and the markedly different attitudes of those students who were beneficiaries of concerted efforts to meet their diverse needs suggests new approaches are in order. Indeed, the collective voices of students suggest it is time for a fundamental rethinking of the institution we know as high school.

Teachers, not surprisingly, offered numerous suggestions. One teacher at High School A observed that sending today's youth to a lecture simply doesn't work. "They have to have hands on ... to see TV, technology." Another experienced teacher at High School C expressed concern about "cooperative learning" or team approaches that are designed to mirror real-life workplaces. He believes the teaching style further undermines weaker performers. "I have had weak kids who have done more on their own." Now, he observes, they too easily defer to the stronger and relinquish too much individual responsibility. "They let somebody else do it. Our overachievers do it all." This widely adopted and recommended teaching method may subtly reward behaviors that many teachers see as a pervasive problem among today's youth, an impatience that manifests itself in what they characterize as an unwillingness to work

without the promise of immediate reward. For those who must struggle more to learn, deferring to the more capable may come all too easily.

Instead of the large classes that are typical of introductory courses, a veteran teacher voiced the belief that critical one-on-one time is needed at the introductory level, particularly in science classes that build on a knowledge base. "The younger-age classes ought to be the smaller ones ... there's a tremendous range of abilities in a class. With juniors and seniors in AP (Advanced Placement) Chemistry, all I have to do is stay out of the way."

Another teacher pointed to the deficiencies that students have when they arrive at high school as the most compelling inadequacy of today's educational system. In most need of immediate, concerted attention, he observed, are the poorly developed reading skills that too many young people bring to high school. As a result, he suggested, they are handicapped in every course and, without intensive and successful remedial education, their fates are virtually sealed.

For their part, students offered a litany of complaints, as well as a number of suggestions. They bemoaned the irrelevancy of reading materials, being treated like children, being policed and harassed over minor infractions, the dirt and disarray of one school, the disinterest and indifference of most teachers, and the myriad demands on their lives. The environments of High Schools B and D were characterized by varying levels of distrust. At High School D, distrust appeared pervasive, as several students questioned the motivations of case study interviewers and voiced suspicions that their presence was a threat. But few expressed outright anger. Instead, indifference and passivity appeared commonplace. One young girl slept through the entire class during which interviews were conducted, refusing to raise her head, something other students said she routinely did.

At High School B, many students expressed considerable anger about their treatment and the conditions of the school. Students were required to wear bar-code identification badges to enter the school and assessed a fee for temporary replacement on any day that they happened to forget it, regardless of their economic means. Both the card and the fee were the source of widespread resentment. According to the principal, the identification tags were adopted in response to community concern that surfaced in the wake of the Columbine shootings. But students saw the situation altogether differently, as an absurd exercise that cost them money and did little or nothing to make the school more secure. "If a person is going to pack a gun in, an ID card is not going to stop them," one student observed. Another suggested, "Most administrators and teachers are more worried about your ID than your homework."

At High Schools A and C, however, fresh, positive, supportive cultures were evident in spite of the brief tenure of their leaders, and the link between the leadership and the culture was clear. While there were notable exceptions, students generally expressed high levels of satisfaction with their school and its

personnel. While neither school has achieved ideal outcomes—one scores poorly on CATS while the other has very low postsecondary attendance rates—the cultures of these schools appeared to be characterized by trust and shared commitment to the future well-being of students.

In spite of many student complaints, High School B also clearly benefits from the presence of some strong veteran teachers, tenacious counselors, a bright, capable leader, and, reportedly, an active, engaged site-based council. With more focus on student well-being and academic achievement, High School B would likely achieve well above the expected, rather than simply as expected.

In general, however, we find that students are not active participants in shaping the future of education, short- or long-term. These case studies suggest that they should be, that students may in fact possess critical information about what teaching methods and materials work and what do not, who is an effective teacher and who is not and why, and how best to counter disciplinary problems. Only High School D had made an effort to gauge student opinion through a very general survey about a number of school criteria, but no responses to the assessment were reported nor were they evident. High School A officials reported seeking to learn from informal, random surveys about levels of student trust, but we do not know how or if the information is used to improve school relationships.

Importantly, at High Schools A and B, we found a small group of students playing highly effective roles as peer tutors and counselors. The success of these efforts suggests that broader engagement could enable changes in numerous areas, from discipline to academics. For the most part, these are remarkably independent young people who could make a tremendous contribution to the improvement of public schools. Indeed, simple acknowledgement of their perspectives, in most cases, would mark a significant change.

At High School D, we found a dismaying culture, evidenced in the defeatism expressed by faculty and staff we interviewed. The near uniform negativity we encountered, even among clearly dedicated professionals, appeared to affect energy levels and, possibly in turn, the postsecondary decisions of students. Indeed, an element of despair was evident among these professionals, from disdain for the principal's lack of leadership to frustrations about the poor preparation of students, the overall state of education, and the poor attitudes of parents and students. One staff member suggested that the perceived economic deprivation of the school's students "hangs like a pall" over the school, providing a convenient blanket excuse for underperformance.

In sharp contrast, High School A's staff consistently expressed a willingness and even a determination to challenge young people, to raise their expectations by exposing them as much as possible to the opportunities that postsecondary education offered, and to elevate performance on standardized tests. Moreover, they have matched that commitment with a host of alternative strategies designed to respond to the unique needs of their students. The

school's atmosphere was bright, positive, and thoroughly pleasant. Students appeared to be enjoying themselves, to be confident in their opinions and knowledgeable about their future options. Remarkably high levels of parental involvement are reported at the school as well as widespread business community interest, participation in, and contributions to the school.

Beyond the warmth of High School A's culture, we also saw evidence of the fruits of positive, upbeat attitudes and the creative energy they appear to foster at High School C. Here, for example, incentives are used to encourage attendance in an area that has historically had high dropout rates. Monthly prizes, including pizzas, haircuts, and artificial nails donated by the business community, indicate that this school understands its "customers." Also, the school has created a reward system, where all these principals complained there is none, for high performance on the CATS tests. High scorers are allowed to bypass final examinations. Throughout the school, a clear sense of students as part of its community was evident in ways that were not discernible at any other school, including High School A. Clearly, this sense of community



within the school was, at least in part, a product of the tightly knit rural town where it is located, but it clearly appeared to be making high school a positive experience for most students.

That relatively new leaders were in place at all these schools may explain the absence of a clear relationship between postsecondary outcomes and the culture they are developing. Cultural change generally evolves slowly. Thus, these new leaders have not had sufficient time to influence a school culture, particularly in locations where many students come from homes

and families that do not value postsecondary education. However, all of these schools have shown some improvement in postsecondary outcomes during the initial years of these principals' tenures.

In general, these case studies suggest that if achievement is to rise rapidly in Kentucky, rather than incrementally, the culture of high schools must change, perhaps radically. The same energy that was brought to school reform in Kentucky is needed to enrich the high school experience, counter alienation or what Steinberg calls "disengagement,"⁶ strengthen academic performance,

⁶ Steinberg.

and enable social development and a level of maturity equivalent to the responsibilities these young people are assuming. However, too little appears to have changed in these institutions in spite of breathtaking external change. From leaders who are focused on order rather than achievement and tired stand-and-deliver teaching methods that were observed in many classrooms, to environments that are cold and institutional and relationships that are characterized by distrust and alienation, some high schools appear relatively unchanged. And that is not good news for the future of education in Kentucky.

Influential Cultural and Economic Factors

These case studies show that external cultural and economic factors, many of which were also identified in our multiple-regression analysis, strongly influence postsecondary outcomes. To no one's surprise, students consistently and most often cited their parents—specifically mothers—as being most influential in their decision to go to college. But other circumstances in the local community, some of which touched the lives of these young people, were also quite influential.

While our findings are consistent with what research has clearly established, that the children of college-educated parents are far more likely to go to college than children of parents who have no college experience, we also found that negative experiences associated with undereducation can also be powerful influences. We found that the more volatile the economic conditions in their immediate environment, the more likely students are planning an escape route via college. Our multiple regression analysis showed that high unemployment rates are significantly related to higher postsecondary attendance rates. On the other hand, students with a more insular world view, who expressed no desire to move beyond their immediate community, were far less likely to say they were going to college.

At High School A, a combination of external factors appears to exert a positive influence on college attendance. The most racially and occupationally diverse school in our study group, High School A is located in a county that is home to a large government installation. As a result, students routinely encounter individuals, including teachers, who are from different cities and states, some of whom have lived in other countries. As a consequence of this large mobile element of the local population, these students are exposed to ideas and perspectives that may help foster a less insular world view. They can and do envision a life beyond their immediate environs, something students at High Schools C and D were far less inclined to do. One student indicated that everybody was trying to get out of the town where High School A is located. When asked where they planned to attend college, students at High School A named an array of colleges around the nation that had attracted them for a variety of reasons.

Low wages, high unemployment, and economic stress in their community also appear to be strongly influencing the decisions of students at High Schools A and B. Wages are relatively low in virtually every industrial sector in the local economy where High School A is located, and occupational opportunities are limited. The county where High School B is located has experienced severe economic upheavals, including massive layoffs and business relocations, in recent years. Based on the comments of students we interviewed, this experience has proven to be a powerful teacher. Firsthand exposure to the consequences of job layoffs, the proliferation of low-wage jobs, and the economic limitations of undereducation has provided a powerful impetus for many young people to get an education beyond high school. Moreover, these factors are undoubtedly shaping the messages these young people receive from their most influential advisors, their parents and their extended families. One student observed that hardly anyone in the school had gone untouched by the economic losses the community had suffered in recent years.

The culture of High School C reflects the agrarian nature of the community where it is located. A striking warmth was evident in this small school, the product of a community where teachers report routinely interacting with students outside school. Perhaps as a consequence, these students were respectful, poised, polite, and surprisingly adult in their perspectives. While the vast majority of the students we spoke with said they were planning to go to college, a strong attachment to place may have discouraged college attendance in the past. A significant percentage of students we interviewed said they planned to continue living in this appealing community, even though it offers few immediate job opportunities. And the county's once-strong agricultural economy historically offered opportunity within the county that clearly fostered a degree of complacency about postsecondary education. However, the strength of its economic base is waning rapidly with the decline of tobacco, and thus these young people face a far less certain future.

Students from High School D, however, seemed the most complacent about the future, in all likelihood due to readily available low-skill manufacturing jobs in the county and the possibility of higher paying manufacturing jobs in the immediate area. As a result, postsecondary education is reportedly viewed as unnecessary by many households. Though some of these students expressed career goals that will demand higher education, others had unrealistic career expectations or they simply wanted a job, any job. Low postsecondary attendance rates are, staff suggested, largely attributable to the devaluation of education by parents. On another level, some of the school's staff appear to promote a vocational emphasis that prepares students for full-time jobs immediately upon graduation.

The powerful and overriding influence of parental examples was evident at all these schools but perhaps most evident at High School D. There, one teacher observed, "You do what your parents do." In the case of the students in his classes, most, he suggested, chose to stay in their home county and work at

one of the local manufacturers that demands little of its employees in terms of education. One of the most significant liabilities for students at this school, this dedicated teacher observed, is that parents who push are “few and far between.” As a consequence, he observed, most students tend to live up to what their parents have taught them, that education does not matter, and that opportunities abound to continue living in their accustomed style.

We also found that having a college or colleges located in the county can influence attitudes about postsecondary education. Students at High School B expressed strong levels of identification with local institutions, often saying they planned to attend school there, and some students at High School A were already taking classes at a nearby community college. On the other hand, students at High Schools C and D face a not insubstantial though quite manageable commute to a college. That colleges are not integral parts of these communities may be quite significant, in that students and their parents are not routinely exposed to the presence of an institution of higher education.

These case studies underscore, among other things, the imperative of economic education in high schools. Students need to be exposed routinely to messages, lessons, and compelling firsthand accounts about today’s economic realities: the impermanence of many, if not most, jobs, particularly those in the manufacturing and agricultural sectors; job mobility and retraining as commonplace employee experiences and employer expectations; the range of options that postsecondary education and training give an individual in the job market; the intangible yet highly rewarding benefits of jobs that require postsecondary education but do not necessarily pay the highest wages; the increasing levels of personal responsibility adults must assume for a range of things that employers once assumed, including planning and financing retirement and larger portions of health care costs; the costs and multifaceted returns to higher education; and the inadequacies of low-wage, low-skill jobs. Too many of these students appear poorly prepared for the economic realities that await them, a circumstance that effective high schools can and should change.

Communications

The lifeblood of a healthy culture is communication, yet beyond computerized telephone calls to parents of absent students, we found little evidence of routine dialogue with parents or students. Only at High School A were communications with parents routine, and administrators reported trying to expand them. In addition to a newsletter, parents receive notification of grades, including mid-terms, by mail, and grading information that is readily accessible is updated weekly. Further efforts were underway to make information available to parents on demand. In addition to ready access to current information on grades, the school planned to make lesson plans readily available during the school year following our site visit. The presence of parents at the

school during the site visit suggests that strong communications with parents have yielded significant benefits: High School A reports a significantly higher level of volunteerism than any other school in the case study group.

High School C, due to its relative size and the close-knit community where it was located, also evidenced strong routine communications but of an informal nature. Both students and teachers observed that most everyone in the community knew one another. The principal and faculty appeared to have a lot of knowledge about the circumstances of the lives of individual students. However, we found no evidence that routine communications between parents and the school had been institutionalized.

Overall, these case studies suggest that students are the party missing from the education dialogue, a policy that appears unwise at best. Ultimately, young people can provide dedicated educators with critical information on how best to reach them, make learning materials relevant to their lives, engage them, excite them about learning, and help them form lifelong habits that will enable them to succeed and make informed postsecondary choices. The empowerment of both teachers and students, which has clearly worked in traditional workplaces, will likely produce results in the work world of high schools as well. Likewise, informed parents are clearly better equipped to motivate young people and help improve schools in a variety of ways.



Ultimately, the effectiveness of a teacher, a principal, or a guidance counselor must in part be measured by the students and parents who rely on these individuals for knowledge of subject matter, skilled instruction, informed guidance, and classroom management. In colleges, where some of these young people are already taking classes, student evaluations of

teacher performance are routine, and they figure in promotions and salary levels. Quite the reverse is found in high schools. Indeed, some of the highest paid teachers in the state are found at one of our lowest performing schools. These circumstances clearly illustrate the disconnect between the performance of educational professionals and student outcomes in our state's public schools.

None of these schools is asking students on a routine basis about the performance of individual teachers, whether they are supportive and encouraging, how knowledgeable they are about subject matter, how prepared they are, how much knowledge they ultimately impart, etc. High School A, however, does seek student opinions about trust levels.

While they are not consulted routinely, we found that students have a definite sense of who the good teachers in their schools are and what qualities

make them so. They consistently expressed appreciation for teachers who are academically demanding but, at the same time, caring and compassionate, who command respect for their knowledge of the subject material, who set clear expectations and work to ensure student comprehension rather than methodically follow a lesson plan, and who treat all students equally, rather than cater to “favorites.” Indeed, students consistently gave their highest marks to tough, demanding teachers. “They get on your nerves,” one student offered. “They want you to make something of yourself; they make learning fun.”

Because students appear to be keenly aware and highly appreciative of quality teachers, their assessments of teacher performance could be key in improving it, ensuring more consistent quality, and, ultimately, improving communications between the very individuals high schools exist to benefit and those who work to meet those ends.

Finally, several principals noted a significant communications problem with the Kentucky Department of Education: the lag time in their receipt of outcomes from the CATS tests. Because they are not made available until after the beginning of the school year, CATS tests do not figure into overall planning or in individualized instruction. Thus, their usefulness has been undermined in precisely the setting where they should make a difference.

Guidance Counseling

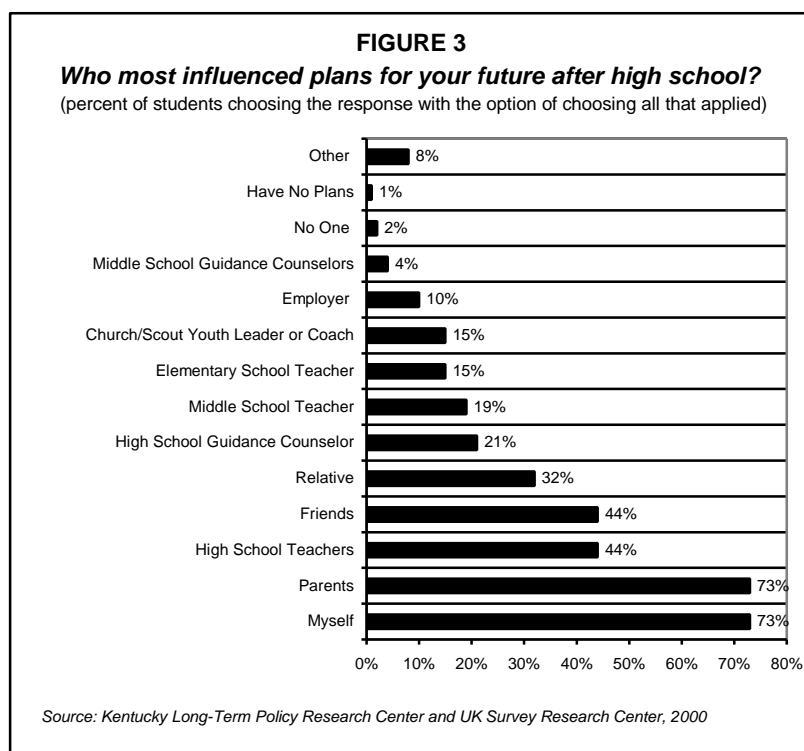
The experiences of the high schools examined in this case study group suggest that effective guidance counseling can positively influence postsecondary outcomes. However, we found little evidence that guidance counselors play a prominent role in the decision to go to college. The roles of guidance counselors, which often include a range of responsibilities, appear to focus more on the mechanics of college-going, rather than on motivating young people to make the choice of doing so.

These findings echo those of the Center’s 2000 survey of high school students as reported in *Talking Back*. This largely college-bound group indicated that teachers at the high-school level had been more than twice as influential as guidance counselors (see Figure 3).⁷ However, they clearly play a key role, as the highest performing schools in the group appeared to have strong guidance counseling teams augmented by a variety of programs designed to enable, encourage, and support the choice to attend college.

These case studies, however, showed little evidence that student-to-guidance counselor ratios are decisive factors because the ratios at all the schools, regardless of their postsecondary outcomes, are quite high. The lowest ratio was more than 400 students per counselor and the highest nearly 550 stu-

⁷ Stephen Clements and Edward “Skip” Kifer, *Talking Back: Kentucky High School Students and Their Future Education Plans* (Frankfort: Kentucky Long-Term Policy Research Center, 2001).

dents, all well above the 250-to-1 ratio recommended by the American Counseling Association.⁸ Interestingly, High Schools A and D had nearly exactly the same student-to-counselor ratios as did High Schools B and C, yet outcomes were dramatically different. Thus, based on these case studies, postsecondary outcomes do not appear to be closely linked to the size of a school's counseling staff. However, the quality of the staff, its participation in decisionmaking, and the leadership to which it must respond are likely key to the effectiveness of guidance counseling efforts.



From these case studies, it appears that students who would likely attend college anyway receive the lion's share of guidance counselors' attentions. We recognize, however, that this observation may be a product of the timing of the site visits during the last few months of school when college-bound students are eager to gain access to counselors. Overall, however, the role of guidance counselors at all these schools appeared to be largely one of providing students with the information and help needed to negotiate the mechanics of going to college, a difficult challenge in itself given the sheer numbers of students per

⁸ Office of Public Policy and Information, American Counseling Association, "U.S. Student-to-Counselor Ratios" (table), Alexandria, VA, 2000.

counselor. Thus, young people who are motivated to inquire about and pursue college or whose academic performance indicates they should be going to college appear more likely to garner the attentions of the formal guidance counseling systems. In the absence of more broadly focused programs, students who are not being motivated by their parents or who are underperforming academically appear to receive less attention. Students in more than one school reported that they had not met with a guidance counselor in more than a year. One student reported never having met with one.

Based upon their remarks and the principal's assessment, the counselors at High School B, which had the highest rate of college attendance, pushed young people to seize potential opportunities, from scholarships to admission to a prestigious school. But they emphasized their desire to help all students, not just those who were top performers and bound for college. Indeed, they expressed concern that too much emphasis was being placed on college-bound students, noting that some were going to college strictly in response to peer pressure. However, many of their duties appeared to be geared to the college bound. To prod postsecondary attendance, they made information broadly available through postings of details about scholarships, weekly phone messages to parents about all scholarships, and through a series of workshops designed to prepare students for the application process, for key tests, including the ACT, SAT, and AP tests, and to assist them with the financial aid process. Juniors are given a packet to prepare them for what they need to do during their senior year if they plan to go to college.

It is important to note that the roles of guidance counselors were diluted by ancillary responsibilities in every school we visited. Counselors assumed duties such as monitoring halls, scheduling, coaching, and even teaching in addition to their counseling duties. Such practices are the source of what one counseling advocate refers to as "role rage." These professionals have reportedly seen their roles become so diluted in public schools that it has become a disincentive to persistence in and entry into the profession. Counselors we interviewed bemoaned the distracting duties that took them away from the work of counseling students about their postsecondary options and life choices. Because part of the traditional role of counselors is also to provide psychological support and guidance, an erosion of this professional role could adversely affect adolescent well-being in a range of areas.

The sheer tenacity and commitment of High School B's counselors no doubt figure in its fairly high college-going rates. However, lower counselor-to-student ratios could in all likelihood help improve postsecondary outcomes, given the additional responsibilities these professionals assume. More counselors are particularly in need at High School C, which is served by just one guidance counselor, who also teaches a class.

In three of the schools visited, the traditional, centralized guidance counseling systems of the past are gradually being augmented by systems in which students are paired with teachers as freshmen and remain linked to them

throughout their high school careers. Ideally, such a system provides students with a constant source of reinforcement and guidance, but much of its success clearly rests on the personality and motivation of teachers, who have previously expressed concern about the dilution of their roles and the nature of the relationship with the student. Only High School C's principal reported that students who found themselves paired with an incompatible counselor-teacher had the option of changing. While teacher-counselor initiatives are still relatively new—the oldest had been in place six years—they potentially provide early introduction to and reinforcement of the possibility of going to college. However, none of the schools reported adopting accountability measures that linked student outcomes with the performance of teacher-counselors *or* formal guidance counselors.

The teacher-guidance counselor program at High School C has evolved to a point where it is supported by a curriculum that exposes students to career options and paths to their development in monthly classroom sessions. In these sessions, teacher-counselors meet with small groups of the students they advise, utilizing the recommended curricula. The program may be a key factor in how well grounded many of these young people appeared to be when discussing the future. They expressed realistic goals and a high level of awareness about the costs and challenges of college. Unusually mature in their conduct, most had formed ideas about what they wanted to do with their lives and most reported solid college plans.

Students at High School A also possessed a high level of knowledge about the costs and the advantages of a college education. Most expressed realistic goals and articulated concrete plans for the future; many had definite plans for college. Most upperclass students at High School B also expressed concrete, realistic career and college plans. In contrast, students at High School D often indicated interest in unrealistic careers and appeared to possess limited knowledge and information about the costs and the benefits of going to college.

As indicated in our survey findings, however, most students suggested that they had made the decision to go to college either in middle school or even elementary school. Thus, these appear to be the points at which young people routinely need to be encouraged to think in terms of preparing to go to college and discouraged from regarding financial or cultural obstacles as insurmountable.

Individual Graduation Plans

In our interviews with staff at these high schools, we learned that state-mandated Individual Graduation Plans (IGP), which were intended to enable educators to accommodate unique learning styles, exist largely on paper. “Once they get here (referring to a file drawer in her office),” a teacher at one high school remarked, “nobody looks at this. They’re just stuffed in a

folder and forgotten.” Part of the problem at the school, she observed, is class size. “It’s very hard to get to know kids when there are so many.” Many teachers at the school, she noted, have 30 to 31 students per class, an unmanageable number in the estimation of many educators.

The principal at High School C also reported that IGP’s were not being used to improve instruction, largely because teachers needed additional training and a push she believed ultimately had to come from her. She suggested that the failing was hers and she planned to focus attention on the gap in coming months. Faculty at High School D also said the plans were not being used.

These case studies suggest that this well-intended tool is not being used systematically at many schools. Only High School A reported using them in conjunction with a series of aptitude tests to help young people make choices about possible careers and prepare them appropriately. By the 10th grade, the school identifies and communicates with the students about career clusters that will be of likely interest based on aptitude testing. During their junior year, all students participate in site visits to a local community college where individuals from the community give presentations geared to individual fields of interest. Similarly, so-called “tech prep” students attend a half-day career fair during their junior year that exposes them to professionals, from lawyers to law enforcement officials, and future career options.

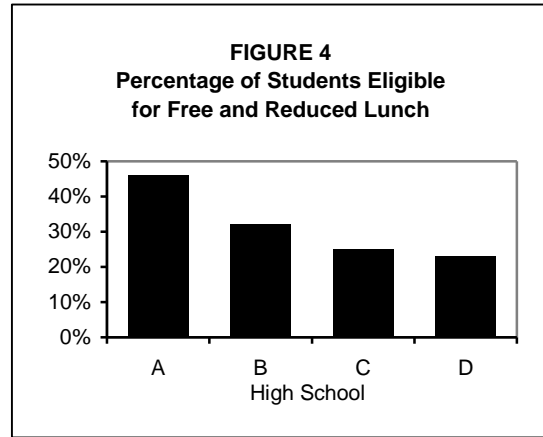
Overall, however, IGP’s, which are intended to address differing learning styles and accommodate unique needs, could help teachers and guidance counselors expand horizons for students who do not perceive themselves as potential college students. However, these case studies suggest that many schools are not using them to improve instruction, and they face no consequences for failing to do so.

Defying the Odds

These case studies offer a compelling testament to a fundamental tenet of the Kentucky Education Reform Act. That is, given equal opportunities, all students can learn. By logical extension, a significant portion of Kentucky students can go on to college and succeed, certainly far more than now do. But if the impetus to go to college does not emanate from the family, both our survey findings and these case studies suggest that instilling higher levels of self-motivation could be key. Notably, three quarters of respondents to our high school survey cited their own personal motivation as being



influential in the decision to go to college, a level of response that equaled the one citing the family as influential. And because the majority of students interviewed for the case studies cited their mothers as having been most influential in the decision to go to college, routine communications with this parent are vital. Ultimately, however, it is vital to expand our understanding of how and



when to encourage and motivate young people to make informed, wise life decisions about education and to understand why some young people make positive choices in the absence of family support. While we cannot speak definitively about the quality of instruction at these high schools and the level of academic preparedness

students have beyond what standardized tests tell us, many of the students at High Schools A and B appear to be defying considerable demographic odds simply by choosing to go on to college.

As shown in Figure 4, our ranking of these schools by their performance in sending students on to college suggests an inverse relationship to poverty rates. The higher the percentage of low-income students in these four high schools, the higher their performance based on both the quantitative analysis and the qualitative assessments of these case studies.

Just as crisis, loss of jobs, market share, and profit motivate firms and individuals, we found that the economic circumstances of the surrounding community appear to strongly influence college-going rates. Our multiple regression analysis found that high unemployment rates were strongly associated with high rates of college attendance. Likewise, we found that students in the more economically depressed counties where we conducted case studies were highly motivated to go on to college. Conversely, students at High Schools C and D expressed a high level of comfort with staying in their home community where poverty was low relative to the comparison communities. In the case of High School D, teachers and administrators saw the ready availability of unskilled jobs in the county as an external factor that served to discourage its graduates from going on to college. One teacher described the attitudes of students as an “isolationist mentality” that narrows their world view and prevents them from seeing possibilities beyond those their families have had and beyond their immediate environment.

In contrast, students at High School A expressed a desire to move beyond the economic limitations of their community. The desire to better one's economic circumstances, however, was most evident at High School B. There, students reported that few families in their community had gone untouched by job layoffs in recent years. As the community gradually lost a significant portion of its blue-collar jobs, these students witnessed at close range the consequences of an inadequate education. Messages from their parents were strengthened by very visible and painful demonstrations of the "education pays" lesson. Several students expressed the belief that higher education would permit them to enjoy greater mobility in the labor force and thus enable them to recover more quickly from the layoffs they seemed to view as inevitable. Hard doses of reality had forewarned these young people about the demands of today's economy and the importance of preparing to meet them.

Overall, however, few educators in these schools expressed the belief that sub-par academic performance in high school may not necessarily reflect a young person's capabilities or that it should not seal their fates. Too many highly successful exceptions to such assumptions are leaders in the very communities where these schools are located. Moreover, the students about whom such assumptions are made are often children of poor or undereducated parents. They did not grow up in a tradition that values education.

For Kentucky to achieve improvements of its college graduation rates, it will be necessary to reach far more potential first-generation college students, ensure that they acquire the critical skills, and instill in them a belief in their own potential and an understanding of the significant limitations that under-education poses throughout life.

While one cannot predict long-term outcomes for her, a senior at High School D reported discovering on the Internet that college was a possibility despite her lackluster academic performance in high school. Her discovery is testament to the importance of promoting postsecondary education as early as possible before students form the belief that college is out of reach for them and adopt behaviors and habits that reflect such low expectations. No one, this young woman told interviewers, *had ever told her she could go to college*, what would appear to be a gross disservice of the faculty and staff of the schools she had attended for 12 years. Instead, she discovered the possibility on her own, an unlikely outcome in most cases.

Not surprisingly, the majority of educators interviewed in this young woman's school (High School D) expressed significant doubt about the abilities of most of their students. Some concerned teachers said many students arrived at high school with deficient reading skills and a world view that excluded the possibility of college. Senior staff of the school expressed dismay about the values of both students and their parents. Indeed, the leadership and faculty of High School D, for the most part, appeared to have conceded defeat, blaming poor outcomes on the economic circumstances of their students, which ironically are among the best we found in this case study group, and on cultural

norms that devalue higher education. Few appeared to believe these young people would or could form identities separate from their families.

High School A appeared to make the most concerted effort to be egalitarian in its approach, perhaps out of sheer necessity. Rather than being dismayed by the outcomes of standardized tests, which suggest discouraging outcomes for this disproportionately poor student body, this school's leadership appears to have risen to the challenge. Given the attitudes and postsecondary plans of students, it appears to be successfully instilling in many students *the possibility* of going to college, regardless of their social and economic circumstances.

High School B also had implemented a number of approaches that minimized economic differences. The much-resented identification badges students are required to wear to gain entry to school also record student lunch participation. As a consequence, there were no observable differences between free lunch students and those who paid. Moreover, the school makes broad-based and inclusive efforts to intervene on behalf of students in trouble, either emotionally or behaviorally. Students in academic trouble receive help from a variety of programs. "You have to work at failing," the principal observed.

These case studies suggest that an unknown but perhaps substantial portion of Kentucky's high schools have either lost sight of or never clearly adopted KERA ideals. Rather than a belief in the potential of all students to learn, mature, and achieve, education professionals at some of these schools had already clearly prejudged the abilities of students due to their backgrounds and thus, no doubt, contributed to the likelihood of their continued underachievement.

Programmatic Support

These case studies suggest that a strong programmatic focus on instilling new attitudes about academics can indeed have a very positive effect on postsecondary outcomes. We found highly effective programs that appear to be strong mechanisms for encouraging higher levels of engagement in academics and engendering social maturity and self-confidence. As a consequence, these programs appear to be raising postsecondary aspirations among their participants. Broadly, the adoption and expansion of such programs could help raise the state's education status in the years to come.

We found that students participating in a range of programs were confident and focused, an indication that more individualized attention, direction, and guidance can help shape far more positive attitudes about learning and achievement and help foster a sense of self-worth. In particular, a limited number of students were beneficiaries of two strong programs that appeared to have elements that are worthy of widespread duplication. The programs provide critical support for at-risk students and helped boost the performance of underachievers.

A Life Raft for At-Risk Students. One worthy small program that we found focused exclusively on at-risk students who were identified by repeat absences, poor grades, or behavioral problems. In this case, a part-time, licensed social worker effectively plays what the principal described as a “surrogate father” role, giving young people both at the high school and a nearby middle school the support and encouragement they otherwise would not likely get. “They have a dad now; a lot of these kids don’t have one,” the principal observed. “He alternately strokes them and kicks them in the butt when they need to be. He essentially teaches them responsibility and accountability.”

The effect of this social worker’s presence in the lives of these students appeared overwhelmingly positive based on observation, interviews, and school documentation. Under his direction, the principal reported, participants had doubled their academic performance. More precisely, the social worker re-



ported that students in his group had, within a semester, raised their first-year grades from a .833 average to a 2.4 overall.

The social worker reported that the 10 to 15 students in his group either had only one parent, step-parents, or emotionally absent parents. “Most fit all three categories,” he observed. “If they have trouble with another teacher or student, they come to me. They have very poor social skills.” Ground rules, he added, are very clear, “They have to do the best they can do every single day. I don’t allow hate; we don’t talk bad about ourselves or others. There are no discriminatory

remarks, period.” Among this small group of students this social worker tries to shepherd through high school, “attitude,” he suggests, is the foremost problem, one they learned from their parents. They are fearless, sometimes angry and remote, but more often than not, thoroughly alone, by his assessment.

“Let’s face it, for most of these kids, this is their biggest social outlet. If they don’t make a connection with a human being here,” he suggested, they may not make one at all. Today, he and many teachers we interviewed observed, most parents work, and young people spend most of their time with each other or alone. If they don’t find caring among friends or in school, it may not exist in their lives. The results, this social worker suggested, are behavioral problems, poor academic performance, and a bad beginning. Caring, on the other hand, he suggests, changes young people. “It’s hard to shout at someone you know and care about,” he observed. “But we’re more focused on making dollars than building relationships.” Importantly, caring is the quality that stu-

dents at each of these schools most consistently cited when asked what made a good teacher.

The High School B social worker described some of the wrenching problems these young people were coping with, problems that made attention to academics a difficult and seemingly insurmountable challenge. From these interviews, it was clear that an effective and supportive line of communication had opened between the students and this trained social worker. Students who spent one of two designated block class periods with the social worker and with peer tutors who provide instructional help described the resident social worker as the father the principal suggested he is, as a tough but caring mentor who pushed and prodded them to keep up with their school work and to attend school regularly. In addition to their clear appreciation of the social worker's role in their lives, participants displayed maturity and a sense of personal direction. Many voiced clear career aspirations. Most were on track to graduate; two said they planned to join the military, an option that held the potential of exposing them to additional opportunities for training and education.

A Helping Hand for Underachievers. A second program that appeared worthy of further study and perhaps wider adoption is one that shepherds underachievers through high school. It focuses on middle achievers, who are earning only mediocre grade-point averages but, standardized tests suggest, should be performing at higher levels. In addition to individualized attention and support, the program is designed to capture the energy of peer pressure and transform it into a positive force for learning and achievement. Students in higher grades help tutor fellow program participants, and, in the process, provide important peer support and encouragement. In addition to the latter social component, these students are engaged in service-learning exercises designed to foster good citizens, as well as economically successful ones.

By design, only a small population of students, who are identified at the middle-school level and selected for participation, enter into the folds of this initiative. On the basis of middle-school performance, students are invited to become involved in this national program, which was being led at High School B by an experienced, dynamic teacher. To participate, students and their parents or guardians must sign a contract that commits them to fulfill all academic obligations and to pursue high levels of achievement. In the program, students are exposed to what appear to be important experiences and support systems that enable them to flourish in high school, including instruction on study habits and one-on-one guidance and assistance with coursework. Further, the program also appears to be instrumental in encouraging students to pursue postsecondary education, instilling confidence in their academic capabilities, illustrating the rewards of hard work, and exposing young people to college campuses through visits to area colleges.

Importantly, the program is also designed to respond quickly when students "get off task" or falter academically. Teachers inform the program director

when problems arise, and staff intervene. Students must write a plan for correcting the behaviors or problems that have interfered with their academic performance and show progress in fulfilling the plan. Likewise, students get positive reinforcement for academic or other achievements. Program participants are rewarded by having these accolades shared with fellow program participants who routinely applaud to acknowledge them.

As previously noted, the program also has a service component. In this case, the director reported that students were visiting a local nursing home, reading to residents and interviewing them about their lives for a journal. Her dream, she proffered, is that students will adopt the residents and prepare a collection of stories about their lives. Program members also reported plans to launch an effort the following year that would involve becoming peer mentors to elementary students, effectively creating an achievement-oriented peer group to which impressionable elementary students could relate.

The testimonials that these obviously confident, high-achieving students gave to the positive role the program had played in their academic lives were remarkable. Partly as an academic exercise in the value of rewriting, junior class participants were engaged in writing speeches about the program. The exercise aside, the grace, confidence, and enthusiasm for the program that these students demonstrated in interviews and in spontaneous testimonials offered strong evidence of a high level of success.

An obvious weakness of the program, however, is that it has no mechanism for accepting students mid-year or permitting students to work their way back into the program if they initially opted out or were dropped for failing to abide by their contract. While the rigid parameters of the program may be a key reason for its success, its structure did not recognize or accommodate changing and improving attitudes among students. According to the dynamic teacher leading the program, many who left early had pleaded to be allowed back in, but the program had no mechanism that permitted them to regain entry.

From every indication, this program was a success worthy of widespread duplication. Arguably, however, its strength may have been a product of its leadership, rather than its mechanics. Nevertheless, all but one of the seniors in the program already had definite college plans, and that student reportedly remained undecided.

Something for Everyone. Beyond the successes of discrete programs, we found that High School A's adoption of a broadly focused effort to support and encourage young people was most worthy of emulation. Among those schools in the case study group, High School A reported offering the most extensive programmatic support for postsecondary preparation through an array of activities, services that recognize and accommodate the needs for guidance and assistance, extracurricular activities, and a curriculum that orients entering freshmen and trains them in study and life skills.

High School A has also begun to institutionalize tenets of the second of previously discussed programs and broaden its availability to all students who need specialized attention. Unlike any other school in the case study group, this school pays peer tutors through a program that was being made available throughout the district. Each school has a resident coordinator of the peer tutoring service, and students, their parents, or their teachers can request or recommend the service. The school's computer labs, it was reported, open at 7:00 a.m. and remain open after school to enable young people to take advantage of tutoring and use computers for their work. The service is available to all students, and it gives them an opportunity to raise poor grades. Similarly, High School B offers after-school tutoring services through each department and gives students an opportunity to raise their grades by working with tutors.

Importantly, all High School A freshmen are required to take a transition class that orients young people to the new, often more stressful and demanding environment that high school presents. Course content also includes life skills such as budgeting and family planning as well as college and career opportunities. Students expressed appreciation of the knowledge the course had provided, and the maturity they evidenced suggested its lessons may be proving their worth.

High School A also provides career counseling in a variety of forms, including integrating it into the curricula. English classes, for example, write



essays based upon reports from *Occupational Outlook*. Further, aptitude tests and career days are used to help students identify fields of interest to students. Online applications to colleges that offer courses in the fields of study for which students have aptitude and interest are also readily available. Utilizing mail-merge software, students can mail the same letter of

application to as many colleges as they like, either from the school or from home.

At High School A, all students must engage in some sort of extracurricular activity, with the intention of fostering social maturity and exposing young people to diverse experiences and possibilities. As one guidance counselor observed, "The more involved students are, the better they perform." Students must participate in at least one club or activity that meets monthly during the school day. Some of the groups reported planned trips off the school's campus to various colleges, local and outside of the region, and to other educational sites such as museums. The ROTC Program appeared particularly strong, pro-

viding solid support, guidance, and life skills training to many students who would not otherwise get it.

Unfortunately, concerned faculty at High School A acknowledged that at times some youth could not participate in off-site events because they simply did not have sufficient funds. Efforts are made to help such students, but the success of these efforts reportedly depended upon fundraising efforts and, at times, the generosity of sponsoring teachers. In general, however, the mature attitudes and solid knowledge about careers, college costs, and benefits that these young people demonstrated suggest that exposure to these diverse experiences is having a positive effect.

Another bright spot in the High School A curriculum involved extensive community support and engaged all students in an early year, all-day, real-world exercise designed to demonstrate the lifelong value of education and training. In this exercise, which the principal says is “probably one of the most effective things we do,” students are assigned an income equivalent to their grade-point average, and they pick chances to determine their family circumstances. Those with low incomes vicariously experience the economic limitations of their status, as they must budget for necessities, seek financing for a home or a car, buy insurance, and pay taxes. Conversely, those whose grade-point averages afford them higher incomes experience the possibilities that their achievements enable. Various organizations from the larger community, including banks, mortgage companies, insurance agencies, and the Internal Revenue Service, participate in the reality-based event.

By contrast, beyond formal guidance counseling, efforts such as those previously discussed appeared to be minimal at High School D. One of the more successful efforts at engaging students was, instead, largely vocational in its orientation. “Our goal is employability,” its sponsor observed. While reporting that a portion of her students opted to go on to college, this highly respected veteran teacher, like many faculty members, suggested that countering home influences and values was enormously difficult. “The kinds of kids who should be going to college are not going, in a large part, because college is not valued. Families do not see a student who is sterling. They just don’t get nurtured or affirmed.” Many, particularly young women, this teacher observed, are often “taken by the wind,” quickly caught up in the consuming responsibilities of marriage and children. Young men, by contrast, she suggested, enjoy more freedom to leave the county.

Though this vocational program helps foster a work ethic, something many teachers at this school saw lacking in their students, it moves only a small group of young people into jobs with local businesses. While clearly more desirable than many entry-level jobs, they are nevertheless positions that, for the most part, will offer minimal opportunity for advancement to higher earnings. The heartening element of the program, however, was its strong leadership, the

effectiveness of which was attested to by the presence of several of its graduates as teachers at the school and even in the same subject area.

All of these schools reported holding evening events to help parents understand the mechanics and requirements of going to college. Each year, upper-classmen, parents, and students are invited to the schools for an evening session to learn how to complete college financial aid forms and applications. Most reported that these were well attended. Indeed, High School C reported “standing room only” attendance for these evening workshops. High School B reported providing a number of workshops for students as well.

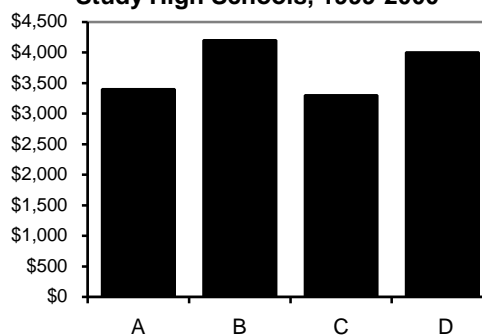
Interestingly, while many of these educators bemoaned the values of young people, specifically their unwillingness to work hard to achieve goals and their reluctance to delay gratification, three out of four of these high schools report having reward systems for attendance. High School B also reported having created a stick to match its generous carrots in the form of a close working relationship with the court system that triggered intervention after a prescribed number of absences. On the carrot side, officials reported having given away a car the previous year to reward perfect attendance. Shorter-term rewards included pizza parties for home rooms with the best attendance record. By comparison, the reward systems reported by High Schools A and C appeared quite modest.

School Spending

These case studies suggest that the intangibles of school environment or culture and leadership that enable the development of such a culture are key factors influencing postsecondary choices. School spending, on the other hand, appears far less influential. As shown in Figure 5, no relationship between spending and achievement is evident in the case study group nor was it apparent from our on-site findings.

In the case student group, High School A spends about the same as High School C, which ranks among the state’s lowest performers on postsecondary outcomes, and High School D, a low performer by our quantitative and qualitative assessments,

FIGURE 5
Per-Pupil Spending at Case Study High Schools, 1999-2000



spends nearly as much as High School B, whose students perform well on standardized tests and in the area of postsecondary attendance. While we cannot generalize based upon the case study findings, they correlate with the findings of our multiple regression analysis, which found no significant relationship between the level of per-pupil spending and postsecondary outcomes. Moreover, they reveal some of the intangibles that contribute substantially to postsecondary outcomes.

Though it spends nearly \$800 more per student than High School A, High School B's physical plant does not suggest that it does. Its classrooms are aging and facilities are poorly maintained. While its classrooms are equipped with networked computers, they were reportedly for use by teachers only, a worthwhile purpose that enables school personnel to track information and communicate more efficiently but one that does not appear to advance broad student access to and use of information technology in the learning process.

High School A stood out in sharp contrast to the group. One thing money clearly does buy—a pleasant, appealing physical environment—does make a difference from the perspective of students. High School A's principal went to work immediately upon his hiring to transform the interior of the school over the course of the summer. A few years after the fact, this school was still refreshingly different from others we visited: bright, clean, and very appealing though it was of the same vintage as High School D. What appeared to be new carpet in some areas and café-style awnings in the cafeteria at High School A helped minimize what would otherwise be a sterile, institutional environment. The result was wholly appealing. Still, High School A spends the least amount of money per student.

While many improvements had been made to High School B, its classrooms were aging, crowded, either too cold or overheated, and generally unappealing, a circumstance that was frequently noted by students. Moreover, the school's condition was apparently a leadership choice. It was reported that the older sections of the school had been scheduled for replacement, but the faculty had resisted and opted to defer the plan reportedly because they opposed the smaller classroom sizes dictated by KERA. For students, the choice made by the faculty had clearly had negative consequences.

High School A had also managed to channel significant resources into computers. The student-to-computer ratio is relatively low, all classrooms are equipped, and students have access to a bank of computers in the school's centrally located library. Students appeared to be using the school's computer lab extensively. High School C is undergoing significant upgrades in its equipment though it does not yet have computer workstations in all its classrooms, a circumstance that will change with the upcoming construction of its new facility. High School D reports the lowest student-to-computer ratio and 100 percent networked classrooms, but by the assessment of its own faculty, much of the school's computer equipment is outdated. Moreover, it was not

evident that computers were being used in classrooms outside of a business education unit where keyboarding was being taught.

All of these schools reported similar student-teacher ratios in 2000, but the principal at High School C reported that the ratio was actually much higher at her school due to an unexpected increase in the student population. At High School D, a senior member of the faculty reported that many teachers were coping with much larger classes than what the School Report Card suggested.

Though clearly not essential to success and not a substitute for effective leadership, adequate funding is undeniably important. It was evident, for example, that High School C could benefit substantially from additional resources. While its aging building is on schedule to be replaced, it has, in all likelihood, been little more than serviceable for many years. Moreover, the school has had considerable difficulty retaining principals and recruiting faculty and staff to the rural area where it is located, a circumstance that new facilities and higher salaries could help alleviate. This school, as well as High School B, has a high student-to-guidance counselor ratio, as the lone counselor must shoulder many unrelated duties. Moreover, the per-pupil level of responsibility being shouldered by the principal was quite high compared to the three other schools. Additionally, the principal at High School C observed that the school needed both materials and personnel.

The performance of High School B, which spends the most per pupil, has the highest rate of postsecondary attendance, and has the highest level of performance on the CATS tests in this study group, suggests spending may indeed make a difference, in spite of our findings and even if it is not readily apparent from the physical plant. However, significant resources at this school are likely dedicated to teacher salaries, as this, like High School D, has a veteran faculty.

Thus, our findings suggest somewhat contradictory conclusions:

- (1) the intangibles of a school culture are far more important than how much money it spends on each student, but
- (2) more resources would permit schools to set and achieve higher goals, improve their physical plants, invest in equipment and resources that enhance learning, and address some of the academic and cultural gaps that often discourage higher performance among low-income and minority students.

Additional resources could expose more youth from poor and low-income families to the possibilities that postsecondary education holds for them through broader adoption of programs such as those we found at High Schools A and B: more campus visits and trips to museums, artistic events, and other learning opportunities, and more one-on-one attention to at-risk and underperforming students. Teachers who are actively engaged in creating site visits for students reported that transportation was the principal cost of these visits. More often than not, participation in the limited site visits and educational trips available, which these teachers have found to be very positive, motivational

experiences for young people, depended upon how much money students had or were able to raise.

Thus, we conclude, resources are clearly more important than these case studies suggest. Without some level of exposure to a college environment, an experience many young people do not have while in high school, the notion of going to college is likely to seem more remote and more intimidating. Opportunities for exposure to professional work environments and participation in other enriching experiences clearly can help broaden the perspectives and the horizons of young people. Such experiences often foster dreams of careers that can become the driving force in the lives of young people, pushing them to achieve way beyond what would ordinarily be expected of them. *Funding broader access to such opportunities could be a linchpin for increasing post-secondary enrollment in Kentucky.*

Clearly, increased revenue could enable significant improvements at these schools, most notably in physical and technological infrastructure, counseling services, academic offerings, college site visits and other enriching off-campus experiences, and, in some cases, faculty and administrative salaries. The latter could help ease the difficulties with recruitment and retention that some of these schools are experiencing. Moreover, additional resources could also broaden programmatic efforts to improve postsecondary attendance. Ultimately, however, these case studies suggest that money is no substitute for commitment to young people from administrators, teachers, and community leaders and the positive, reinforcing environment that that commitment creates.

The Demands of Paid Employment

Because some education researchers believe that employment—and play—are consuming far more time in young people’s lives than academics outside the classroom, a finding our high school survey confirms even among college-bound high school youth,⁹ we asked the students and educators we interviewed about paid employment and its effect on academic performance. Specifically, we asked why young people choose to work, how many hours they work during the average week, and what influence their jobs have on their studies and their lives.

When we interviewed students, we found that the majority of juniors and seniors and about a quarter of underclass students at these schools have jobs that they acknowledge are quite demanding and even intrusive in that they interfere with their studies. In interviews, students routinely reported working in part-time jobs, but a not insignificant portion of students reported working in what would more closely approximate full-time jobs, that is, jobs that require between 30 and 40 hours a week. The majority of juniors and seniors we inter-

⁹ See Clements and Kifer.

viewed reported having jobs at which they usually worked between 15 to 30 hours a week. Around half of these students reported working more than 30 hours a week. One girl in a sophomore-level class, for example, reported working in excess of 40 hours a week in her parents' business. In isolated cases, students reported working even more hours. Combined with the demands of school, clearly all these young people who are engaged in paid employment are working far more than the 40-hour work week our society recognizes as full-time employment.



One school professional observed that she believed paid employment, even through school cooperative programs with local employers (co-op programs), is inhibiting social development and undermining an important sense of ownership. When asked why students work, she responded, "Some have to work. Then again, there are some kids who want to wear the best clothes, drive the best car. They think they have to." So

many seniors at High School A are employed in co-op programs, she recounted, that when they returned to rehearse for graduation ceremonies, "It was really weird. Some seniors who hadn't seen kids for a long time didn't realize the class was so big." Moreover, she questioned the value of the work experience. Many students who are employed through the co-op program, which only requires them to work 15 hours a week, are employed in fast food restaurants, work split schedules, and, she suspects, sleep late in the morning. "They're not going to know what it's like to have an eight-hour-a-day job."

In a historical context, one veteran teacher observed that students today are far more worldly and independent than they were when he first began teaching 30 years ago. "They basically take care of themselves. Some do a very good job and some need some help," he said. "... I think they're losing out. Both parents work; they're always on the run. They all have to have a car ... *think* they have to have a car." Instead, he suggests, most need something far less tangible. "So many need structure, guidance, a firm hand, and they don't have it." As a result, he reports seeing more "unhappy" kids now. "They really have some deep problems; you can tell they have no home life." He adds that, as always, some young people are angry, probably more than in the past. "I think they have more to be angry about."

When asked why they worked, the vast majority of these students said they had gotten jobs to finance things their parents either could not afford or would not buy them, including and most prominently cars and automobile insurance. Some said that having a job enabled them to buy clothes and entertainment their parents could not afford or expected them to pay for on their own. A remarkable number of these young people reported being caught in the classic materialistic traps of adulthood, working to pay for the things they believe they must have to maintain the lifestyle they want and sacrificing quality of life for it. Significant peer pressure and the classic adolescent yearning for freedom that a car has long symbolized combined to push most of these young people into an altogether willing labor market.

The principal at High School A, like many concerned teachers and administrators at this and other schools, expressed concern about how many hours students work and its effect on their studies. However, he acknowledged that his school, perhaps like many others, depended upon support from many local businesses, and these businesses expected access to the low-cost labor force that this high school and others provided through its senior co-op program.

The principal at High School C estimated that 85 percent of juniors and seniors at the school were employed at some level. Some are permitted to leave school as part of the school-to-work program for one block of classes, but only for certain kinds of jobs or if their job reflects their Individual Graduation Plan.

While teachers at High School D expressed the belief that some of their students are principal breadwinners for their families, students at this school, like those at the other schools, reported that they had jobs to pay for things they wanted, most often a car, automobile insurance, and, to a lesser extent, clothes. Some said their parents could not afford to buy them a car or automobile insurance while others said their parents had insisted that they be responsible for this cost. Thus, for most of these young people, a job is clearly the means to transportation, and transportation is required to hold down a job. One teacher likened the "Catch 22" situation many of these young people find themselves in to that of "a rat chasing its tail. They have the car for the work, the job for the car."

On the positive side, these case studies suggest that a large percentage of high school students are assuming a high level of responsibility for their own finances. Working students consistently suggested that they assume a remarkable level of independence, assuming responsibility for meeting many if not most of their own personal expenses, outside of housing. In addition to assuming responsibility for car payments, car insurance, the motivation for employment in most cases, students routinely reported generating their own spending money for clothing, food, and entertainment. Moreover, many are realizing through experience some of the lessons, including the adult-life traps of excessive materialism, about delayed gratification, the inadequacy of low-wage jobs, and the importance of financial planning, savings, and investment.

Only students at School C, the most rural school in the study group, appeared to be less financially independent, though a majority of juniors and seniors reported working part time. In this school, we met one student who reported that her mother would not permit her to work for fear that the demands of a job would interfere with her studies. Only a very small number of students, about three at each school, said they did not work because their families would not permit them to do so. Otherwise, students reported no parental objections to their work; indeed, many said they worked because their parents either encouraged or expected them to do so to meet their own expenses or refused to finance the things students wanted.

In the area of paid employment, we found real irony in a sophomore class of lower achievers, who vigorously protested their school's (High School B) treatment of them. While paid employment demands a certain level of maturity and responsibility, some of these lower achievers suggested that the academic expectations they faced were far too demanding for them. "They expect too much of us. We're just kids. They expect us to come and work all day, then work all night." These same students fairly consistently acknowledged that they held jobs to support their "habits" or "hobbies" though many clearly were motivated by financial need. Many of the students we interviewed acknowledged, some laughingly, that their jobs precluded them from spending any, much less sufficient, time studying.

Drawing Strength from Social Capital

On the whole, our findings in these case studies mirror those of national studies that show involved parents help to strengthen academic performance and educational aspirations.¹⁰ They also strongly suggest that the intangible ingredient that has come to be known as social capital may figure prominently in whether students pursue education beyond high school. In this case, social capital includes both broad citizen involvement in the life of a school and the formation of communities or social relationships within the school. Such social networks strengthen the capacity of schools and educators and offer students academic and emotional support.

In this case study group, High School A is clearly the exemplar. Here, we find parents who log a remarkable number of volunteer hours, a business community that actively supports and encourages the school's academic and extracurricular pursuits, and an array of extracurricular activities that offer

¹⁰ See, for example, "Factors Associated with Fathers' and Mothers' Involvement in Their Children's Schools," *Issue Brief* (National Center for Education Statistics) April 1998 (NCES 98-122); Christine Winquist Nord, DeeAnn Brimhall, and Jerry West, "Fathers' Involvement in Their Children's Schools," U.S. Department of Education, Washington, D.C., 1997; A.T. Henderson and N. Berla, *A New Generation of Evidence: The Family Is Critical to Student Achievement* (Washington, D.C.: National Committee for Citizens in Action, 1994).

opportunities for every student to belong to smaller communities based on shared interests. Some of the smaller communities within these schools appeared to be having a very positive, nurturing effect on the lives of students. The sense of trust and shared commitment to the well-being of students was strongly evident.

A separate research track, which is detailed in Appendix B, sought to discover, among other things, whether the strength of ties to community among school personnel is linked to over- or underperformance. That is, we asked, does having a higher percentage of natives of the county—or graduates of the school—as part of the faculty improve postsecondary performance? We pursued this theory based upon early findings from a study of teacher transcripts that suggested a potential link, the theory being that those who have a stronger bond with the school or the community may have a higher commitment to success.

Overall, our examination of available teacher transcripts for 1998, the corresponding year of our multiple regression analysis, from the 10 highest and 10 lowest performing high schools found no significant difference between them in regard to the ties of teachers to the community. That is, we found no evidence that having a higher percentage of natives of the area or graduates of the high school serve as principals, teachers, and guidance counselors had an effect on the percentage of students who went on to college.

The schools selected as subjects for these case studies, however, suggest that social capital or ties to place may be important to success, an assertion that runs counter to the usual assumption that imported talent is a strength in our undereducated state. A considerably larger percentage of faculty for whom we were able to secure transcripts at our overperforming schools were either from the county in which the school is located or actually attended the high school where they now teach. At High School B, which has the highest college-going rate among these schools and meets performance expectations based upon our analysis, a remarkable 45 percent of the faculty, including guidance counselors, actually went to the high school. The percentage increases to 55 percent when we include faculty from the county, to 77 percent when faculty from adjacent counties are included, and to 84 percent



when we include those from the region (that is, no more than two counties between their home county and the county where they now teach).

We also found evidence of strong ties to place among the faculty of High School A, our highest performer. Specifically, 36 percent of High School A's faculty was either from the county in which it is located or attended the high school where its members now teach; only 19 percent actually attended the same high school. When those from adjacent counties are included, the percentage increases to 48 percent and to 62 percent when those from the region are included.

We found slightly weaker ties to place at High School C; 24 percent of High School C's faculty for whom we could secure transcripts are from the county, all of whom attended the high school. When we expand that to include those from an adjacent county, however, the percentage rises to 48 percent, and to 62 percent when we examine the region which is predominantly rural and likely home to shared values.

At High School D the social capital from which to draw is, in all likelihood, weaker still due to an altogether different population makeup. Only 14 percent of the faculty actually attended the high school. The percentage rises to 22 percent when we examine available transcripts to determine what percentage are actually natives of the county. The social dynamics of the county, however, are, according to faculty, such that the various socioeconomic classes of this populous county are quite segregated. The percentage of faculty with seemingly close ties rises to more than half (54 percent) when adjacent counties are taken into consideration, but the number is deceptive in that many teachers are drawn from an adjacent metropolitan county that has a dramatically different identity than this county's.

Indeed, some teachers at this school lamented the fact that such a large percentage of the school's faculty come from this adjacent county and have no real ties to the community. They indicated that more than half of the faculty commute from outside the county. As a result, a respected teacher observed, "There's not a significant investment in this county ... no roots beyond a paycheck."

Concluding Observations

As this qualitative examination of selected schools suggests, a number of factors, most of which are intangible, appear to exert a strong influence on the performance of schools in regard to postsecondary outcomes. For example, the attitudes of formal school leaders towards their fellow educators and, most importantly, towards the students they are responsible for educating are key to the success of students.

Moreover, these intangibles can overcome incredible odds. Just as the Education Trust shows in its recent national analysis of high-performance schools,

the socioeconomic variables that some believe predetermine performance are being systematically overridden in thousands of public schools across the United States. Nationally, more than 4,500 of what the Education Trust terms “high-flying” elementary and secondary schools educate more than 2 million students. It is heartening to learn that half of these high-performing schools with high poverty rates are located in rural areas or small towns, which suggests that the possibilities for Kentucky’s future are only limited by the scope of our vision. While just 37 percent of students are low income nationally, 72 percent of students in these high-performing, high-poverty schools are poor.¹¹ In short, just as our case studies suggest, schools can and do beat considerable socioeconomic odds, but only when their leaders, from the front office to the classroom, are committed to the challenge.

Table 1 illustrates the role that a number of the intangible factors we identified appear to play in school performance. Plus or minus signs indicate whether the factor is positive or negative; in some cases, we show a combination of the two signs, indicating a mixed influence. The first sign represents the more dominant one.

TABLE 1				
Factors Influencing Postsecondary Outcomes				
	High School			
	A	B	C	D
Leadership/Management Style	+	-/+	+	-
Culture	+	-	+	-
External Cultural/Economic Factors	+	+	-/+	-
Communications	+	-/+	+	-
Guidance Counseling	+	+	+	-
Individual Graduation Plans	+	-	-	-
Defying Effects of Poverty and Undereducation	+	+	-	-
Programmatic Support	+	+	-	-
School Spending	-	+	-	+
Paid Employment	-	-	-	-
Social Capital	+	+/-	+/-	-

Our findings will not surprise those who understand the fundamental requirements of education reform. That is, if educators do not believe in the potential of their students, provide consistent, positive support and reinforcement, and set high expectations for them, young people are unlikely to thrive academically or socially. Certainly, they are unlikely to overcome home influences

¹¹ Craig D. Jerald, *Dispelling the Myth Revisited: Preliminary Findings from a Nationwide Analysis of “High-Flying” Schools* (Washington, D.C.: The Education Trust, 2001).

that range from poverty, isolation, and violence to the systematic devaluation of education and, ultimately, of these young people's lives.

While higher education is clearly not for everyone, a truth we too often forget, that this opportunity is being lost to so many young people in our state who have the capacity to achieve and to know the fullness of a truly prosperous life is indeed a failing of our educational system. And this system is not a nebulous form but rather the neighborhood school, a place where young lives are literally being shaped, for better or worse. Because each failure of this system becomes a virtually incalculable social and economic loss for our state, it is clearly in our collective interest, even if our only connection to local schools is that of paying the taxes that help support them, to ensure that what every school and every educator achieves is the very best possible result.

Ultimately, all of us are enriched by an educated populace, just as we have struggled as a state throughout the 20th century to overcome the liability of an undereducated one. As Amy Watts has shown in *Education and the Common Good*, each of these losses of human potential directly exacts a toll in, among other things, prisons and welfare benefits, and indirectly fosters the loss of important intangible benefits such as the volunteer hours that more educated citizens consistently dedicate to the betterment of their communities. Thus, each of us not only has a role to play in urging, prodding, and pushing education to its highest possible level of achievement but a clear stake in its success. In essence, we are part of the intangible force that helps make high schools, indeed all schools, places that consistently value young people and continuously strive not only to educate them but also to show them the value of learning and guide them to a successful future.

Action Items

If we are to transform Kentucky high schools into places where learning and its immense possibilities become inviting adventures worthy of lifelong pursuit, dramatic change will be needed. To transform these critically important institutions, it will be necessary to counter the alienation and disengagement that appear to be so prevalent among high school students. At the same time, it will be necessary to engender a new culture in high schools that is driven by committed, entrepreneurial leaders and defined by a fuller understanding of and a responsiveness to the needs of today's youth, which, in spite of their seeming independence and maturity, may be greater than ever before.



With these lofty but, we believe, achievable goals in mind, we offer the following action items not only for the consideration of education officials and policymakers in Frankfort, but also, and perhaps more importantly, to community, business, and school leaders, from school board members to classroom teachers, across the state. Ultimately, the job of educating our youth belongs to those on the front lines of our schools. Regardless of edicts from Frankfort, the passion and energy for doing the job of educating our youth right must emanate from them. In turn, our communities—parents, interested citizens, and the educational institutions, businesses, and industries that rely upon the talents and abilities of the young people who are products of these schools—must expect and even demand excellence from every school and every educator. With that in mind, we offer the following action items.

Focus on Leadership Development

As we believe these case studies reveal, leadership is key to shaping high school cultures that engage and challenge young people academically, enrich them socially, and, perhaps most importantly, value them individually.

Given today's enriched understanding of leadership in the workplace, we know that effective leaders exist at all levels of hierarchies, and truly successful appointed leaders are those who, among other things:

- engage teachers, counselors, staff, parents, and the larger community in shaping and realizing a shared vision of the preferred future for each student as well as the school;
- make the case for investment in that vision to school boards and ultimately to the larger community;
- inspire and facilitate trust and cooperation;
- through continuous learning opportunities, empower staff—and students—to experiment with and discover new curricula and more effective, responsive teaching methods, programs, and reward systems;
- cultivate and formalize routine communications between school personnel and students, their families, and the larger community;
- develop effective working relationships with “customers,” local and regional colleges, and “suppliers,” middle and grade schools that permit each to play mutually supportive roles;
- enhance a sense of school ownership that, in turn, increases student, faculty, parent, and community commitment to its achievements, from performance on the CATS tests to critically important postsecondary outcomes;
- continuously measure outcomes to determine the effectiveness of programs, teaching methods, personnel, etc., and make corrections and improvements as needed; and,
- dare to seek student assessments and opinions and respond to their criticisms and needs in a timely, thoughtful way.

By providing education and training in leadership and management skills to both future principals and teachers who train in our universities and colleges, and in continuing education and professional development opportunities, we can cultivate far more effective leaders in our schools and classrooms. Arguably, we should expect a requisite amount of training in these vital skills of those who assume leadership of classrooms and schools. Likewise, school boards and site-based councils need such training to identify leadership qualities and management skills in candidates for the posts they are responsible for filling and to evaluate performances. Moreover, as the Prichard Committee is now exploring in its work, it is likely that leadership training for interested parents and citizens will foster more effective advocates for students, schools, and education in general and cultivate the level of social capital we need to achieve better results. In short, leadership and management skills must become an integral focus in the curricula of education schools, in professional development initiatives, and in other areas that will enhance the capacity of the larger education community.

At the same time, as we note subsequently, we must recognize that progress in regard to postsecondary outcomes is, at least in part, a reflection of leadership and management skills. Unless continuous improvement in postsecondary performance is an expectation of these professionals, a criteria for evaluating their performance both at the local and the state level, we cannot hope to realize the goals we have set for the future.

The clarity of vision that emanates from a truly effective leader energizes and empowers employees to learn, to become more entrepreneurial, to experiment, to strive constantly for improvement, and, ultimately, to become leaders in their own right. In turn, they can become a source of inspiration to students. In short, leaders energize an institution, regardless of its mission, as we saw in High School A, and, to a lesser extent, in Schools B and C.

In turn, they can and will shape the answers to the central question we ask here, “How can we increase postsecondary enrollment and improve academic success?” Their entrepreneurial energy will give life to positive, productive student-faculty relationships; meaningful, rewarding courses; effective, results-oriented programs; caring, compassionate responses to those in need of support; and improved social, academic, and postsecondary outcomes.

We have long known that educators, particularly teachers, can play critical, transforming roles in the lives of young people, but these case studies suggest that a not insignificant portion of them may be negative rather than positive forces in the lives of young people. If the defeatist attitudes we encountered in some education professionals are shared by other educators that students routinely encounter, they will continue to discourage young people from achievement. Given the tremendous obstacles that potential first-generation college-goers already face, educators cannot be instruments of negativism. Instead, they must be sources of inspiration, providing a consistent counterpoint to families and friends who may devalue education and offering a constant, steady voice of optimism and possibilities.

Only united, committed staffs in our high schools, and schools at all levels for that matter, can help young people and, ultimately, the Commonwealth of Kentucky realize optimum postsecondary outcomes. A fragmented or divided school with disillusioned staff, regardless of the resources available to it, cannot foster improved academic and postsecondary outcomes. Leadership is key.

Expand Support for Programs to Improve Academic Performance

While small in scope, we encountered some remarkable special programs during the conduct of these case studies. Students who were engaged in these programs were testaments to their remarkable benefits. While broader adoption of the program for underachievers would likely help improve outcomes for many Kentucky high school students, its focus is limited. However, several elements of this program, many of which have been broadly adopted by

High School A, should, we believe, become standard fare in Kentucky's high schools. They include:

- Formal liaisons with middle schools—and area colleges—that permit educators at all of these institutions to jointly identify and address needs that will permit more successful transitions to the various levels of education and ensure adequate academic preparation;
- Peer tutoring and peer counseling by academically successful students, preferably for which they are paid, eliminating the need for them to seek employment off site, encouraging continued levels of competency among those who are tutoring and being tutored, and providing important peer mentors;
- Rapid intervention in the form of tutoring or counseling when problems with grades, homework, attendance, etc., arise—not after they have precipitated failure;
- Comprehensive orientation for all entering freshmen that acclimates them to the environment, trains them in study skills, and even, as High School A does, provides some of the life skills preparation they will soon need, from balancing jobs and schoolwork to comprehensive understanding of the costs, future benefits, and preparation needed to go to college.

Increase Investments in At-Risk Students

If we know that Kentucky's future depends upon its ability to enroll more first-generation college students, we must focus increased resources on those students we know are least likely to go on to college, namely those who are at risk, that is, students who are poor, who enter high school with poor reading skills, and whose home life circumstances interfere substantially with their schooling. To do so will require further investment in interventions such as those we saw at High Schools A and B, in social workers and counselors who can guide and encourage students with behavior problems and tutors who can provide intensive one-on-one academic support that will enable students to gain lost ground rapidly.

Importantly, college site visits and other off-site educational experiences that expose young people to life possibilities beyond their immediate environs that they may not otherwise experience are vitally important. Participation in such activities must not be restricted to those who can afford them if we are to make gains among would-be first-generation college-goers.

Unfortunately, high school interventions come too late in many cases. Ultimately, greater investment must be targeted where these case studies and our high school survey suggest they will be most effective, at the elementary and middle-school levels. In addition to ensuring that all students, particularly those who are not receiving encouragement and support at home, are prepared academically, we must open their minds to possibilities. Because students begin to form visions of their futures at early ages, it is key that we reinforce the possibility of college, its affordability, and its enormous benefits frequently, persuasively, and consistently. Instilling children of the Commonwealth with a belief and confidence in their potential, no matter what their life circumstances, must become central to education.



Moreover, we must add new voices of experience beyond those of educators to those children hear. Successful Kentuckians, particularly those who arose from poor circumstances, can impart messages in person or via teleconferencing or on videotape that can form the foundation for writing and other academic exercises even as they encourage and foster dreams. Such a program, perhaps utilizing and expanding materials already developed by Kentucky Educational Television, could become an effective teaching tool that nourishes new visions.

Improve Accountability Measures and Reporting

Refinement of the performance accountability criteria for schools, these case studies suggest, is needed. Most notably, accountability measures for schools must give far more weight to postsecondary outcomes. A myopic focus on results of the CATS tests belies the clear understanding among both educators and students at the high-school level that these tests are of little or no consequence to their futures. Indeed, one principal notes that results show that the best students are among the least concerned about their performance on these tests.

On the other hand, whether a school meets its predicted postsecondary outcomes is a vitally important, noncognitive measure of “success.” Further, whether schools fully apprise and educate all students about their postsecondary options, facilitate the necessary college preparatory steps, send an appropriate portion of students on to college, and provide an academic foundation that enables their persistence in college has a great deal to do with the quality

of their high school and its educators. These outcomes—and performance criteria—should be routinely measured in light of the kind of comprehensive data that the Long-Term Policy Research Center gathered about high schools, data that tell us more about how schools *should be* performing, rather than the static data that are now collected and reported but seldom evaluated. If we are truly dedicated to improving education at every level, the failure to achieve expected postsecondary outcomes and continuously improve them must be considered key criteria for school accountability and, arguably, professional competency.

Likewise, School Report Cards, which are important accountability and data collection tools, could provide parents and other interested parties, including researchers, with far more comprehensive profiles of schools. For example, neither raw numbers (i.e., the number of students whose parent or guardian had at least one teacher conference) nor averages paint truly accurate portraits of schools. At the same time, valuable information that is clearly pertinent to performance, such as postsecondary outcomes, is not included, nor is there information on counseling resources and activities or on programmatic support for academic and social problems. In short, these report cards should answer questions about the personnel, time, and energy a school dedicates to ensuring that its students are fully informed about and prepared to make critical life decisions. This kind of information appears far more relevant than the disproportionate amount of space dedicated to “school safety.” While schools should and must be concerned about safety, its level of importance should not be permitted to eclipse the fundamental purpose of these institutions, that is, to educate young people and prepare them for the future. Indeed, such information should be relegated to the expanded report card, rather than the far more relevant data on performances on SAT, ACT, and Advanced Placement tests that presently can only be found there.

Reconsider, Restructure Incentives

As previously noted, the findings of these case studies strongly suggest that, while some incentive systems of reward, encouragement, and reinforcement for high performance are being created in individual high schools, adolescents have little or no incentive to perform well on the CATS tests. School administrators and teachers at every school we examined observed that the CATS tests cannot become a reliable measure of the performance of schools so long as rewards or incentives for high performance are not aimed at students. Because our multiple regression analysis shows that CATS tests performance is significantly related to postsecondary attendance, it is vital that the cognitive skills these tests measure be fully developed.

Principals from these schools suggested the possibility of tying the level of reward from the KEES scholarship program to CATS performance rather than the current link to grade-point averages and performance on the ACT, which encourages grade inflation and, they assert, discourages Advanced Placement

course-taking, an important entrée to college. Moreover, linking rewards to performance on the ACT narrows the focus to those who are already college-minded when the potential reward of a larger scholarship linked to test scores might entice more students to become college-minded.

Make Information-Sharing Integral to Professional and Institutional Development

These case studies illustrate the important role that information-sharing can play in improving educational outcomes. Knowledge about what works and about transferable ideas can be key to improving academic and, in turn, post-secondary performance. To that end, part of the framework for achieving long-term education goals in the state should include a routine and formal vehicle for facilitating conversations between educators within districts and regions, and across the state—and beyond—about teaching methods, curriculum, special programs, incentives, etc., that get results. In addition to fostering teamwork within schools, an ongoing dialogue, utilizing e-mail and video-conferencing, as well as routine meetings that feature successful efforts and model practices, could enrich understanding and improve practices statewide.

Consider Statewide Standards for Guidance Counseling

These case studies suggest that no matter how committed and hard working guidance counselors may be, they often are being stretched far too thinly and assigned too many tasks unrelated to their core mission to perform their jobs effectively. While we undoubtedly have many strong advocates of post-secondary education and training in high schools across the state, advocacy will likely need to become evangelism if we are to raise the percentage of high school graduates in Kentucky who pursue postsecondary education.

Given the state's high rates of undereducation and poverty and the proven links these demographic factors have to low rates of college attendance as well as the many substantiating observations about the power of local culture heard in interviews for these case studies, we can safely assume that many families lack the resources, cultural or economic, to provide their children informed guidance about postsecondary choices. Unless we make such guidance an integral part of education, at every grade level, only those children fortunate enough to have motivated and motivating parents will pursue postsecondary education options. Indeed, this appears to be the current situation.

In short, unless we adopt a more aggressive posture to encourage young people to pursue postsecondary education and fully inform them about their choices, the ready availability of financial assistance with college costs, the mechanics of applying for college admission and financial aid, and the tangible and intangible benefits of postsecondary education or training, nothing will change. Too many young people interviewed for these case studies still view

college as unaffordable, a perception that must be countered at the earliest possible age to deter discouraging academic performance borne of resignation. As it is, peer pressure already depresses academic performance. A consistent, positive, countervailing pressure is needed, and as the special programs we detail demonstrate so successfully, at least part of it can come from successful peers.

Moreover, we cannot expect postsecondary attendance to increase when any high school student can report in her senior year, as one young woman did, that no one had ever discussed with her the possibility of going to college. Too



many exceptions to the rule that grades and performance on standardized tests dictate postsecondary capabilities can be found among competent professionals in today's work world. Some of the authors of this report, for example, confess to having been disinterested, largely disengaged high school students who routinely underperformed. To rule out postsecondary options based on high school grades or even standardized test performances, which oftentimes reflect stresses external to the school, seems particularly inappropriate given the circumstances we found in High School D. That students have not risen above the school's culture, much less their

community's culture, which educators portrayed as an educational wasteland, should not seal their fates.

Research is clearly needed to learn more about what difference trained counselors are making in postsecondary choices and what counseling strategy best works. We found, for example, in our survey of high school students that critical postsecondary choices are being made at an earlier age than it would appear traditional counselors begin to focus on postsecondary choices and plans. It is also important to learn more about the efficacy of teacher-student counseling initiatives like those we found at High Schools A and C, determine what curricula best work and when these efforts should begin. Middle and perhaps even the latter years of grade school may be the most appropriate time.

In the meantime, it is clear that counseling efforts could be improved greatly by permitting counselors to do more of what they are trained to do, rather than blurring their roles and diluting their effectiveness. At the same time, we must raise our expectations of guidance counselors. Policy options include:

- Consider establishing a student-to-guidance counselor ratio and a time line for implementation that will permit school districts to plan and budget for the transition;
- Shift all unrelated duties such as scheduling, hall monitoring, teaching, and coaching to other personnel;
- Train counselors to guide and assist academically troubled students as effectively as they assist the likely college-bound student;
- Build on the efforts of High Schools A and C and create a career curriculum that counselors/teachers can use to help young people make more informed postsecondary choices;
- Establish counseling goals that must be achieved for students at every year of high school—and, our research suggests, elementary and middle schools—placing special emphasis on entering freshmen and the need to establish learning habits as early as possible that will support and enable academic success; and
- Systematically measure a range of outcomes, including among other things, postsecondary attendance rates, timely fulfillment of graduation requirements, college or vocational preparation, and communications with parents. Student and parent assessments of the quality of assistance received from guidance counselors should figure prominently in the evaluation of the effectiveness of these professionals.

Further Examine Effects of Paid Employment

We found that the majority of juniors and seniors we interviewed and a significant portion of sophomores and freshmen work extensive hours in paid employment. As a result, many juggle an extraordinarily demanding schedule, the equivalent of two full-time jobs, that leaves them tired, sleepy, and disengaged from the academic and social life of their school. Teachers and other school personnel consistently said they believe the demands of paid employment undermine academic performance and, in some cases, create financial traps that may influence and even dictate postsecondary choices for young people, requiring them to work to meet financial obligations and discouraging them from assuming more debt to pursue postsecondary education. More importantly, students consistently acknowledged that paid employment interferes with their studies. Indeed, when asked if work interfered with their studies, some students laughingly responded, “What studies?”

Ideally, work experience helps cultivate good work habits and financial responsibility, but many teachers saw reason to be alarmed about the other messages that so much work so early in life sends to young people. One counselor expressed the belief that seniors at High School A, most of whom choose to work half a day, were losing important opportunities for maturity and socialization. From unbridled materialism to an inability to delay gratification, most

teachers at these schools cited student overwork as an obstacle to achievement, rather than a facilitator.

It also appears that co-op programs with local employers may, in some cases, simply be allowing some seniors who have fulfilled most of their credit requirements—more than half the senior class at High School A—to avoid the demands of further studies. Several educators expressed concern about the value of the co-op experience, which they said too often consisted of fast-food jobs that indirectly sanctioned avoidance of the work of learning, the net effect of not being at school.

Alternatively, cooperative agreements that some of these high schools have with local colleges enable qualifying seniors to begin taking college-level courses when they have fulfilled their course requirements. These arrangements, we believe, are positive steps that encourage college attendance and orient young people to campus life, an important experience for first-generation college students. They are far preferable to permitting young people to leave campus to work in jobs that, from the perspective of job training, cannot be justified.

While it is clear that students will continue to seek employment and employers desire their low-cost services, every step must be taken to ensure compliance with labor laws designed to protect them from the levels of overwork they reported. To do so, it may be necessary for schools to educate parents and students about labor laws and the potential costs and consequences of working



long hours. Further, schools should be required to ensure that employment through co-op programs or school-to-work offer meaningful work experiences that are linked to career opportunities, rather than conveniences for local employers and disengaged students.

While our survey of high school students found no significant relationship between poor academic performance and overwork, these case studies suggest that an altogether different reality may exist for those who do not go to college. Indeed, paid employment may subtly encourage avoiding preparation for college. Further study is needed to determine

the effects of paid employment on the students who most need academic attention, underachievers and at-risk students.

While we cannot prohibit paid employment, schools should be discouraging excessive hours of it by raising the bar for all students, requiring them to

fulfill homework assignments and meet academic benchmarks that would permit them to achieve competency. At a minimum, schools—and parents—must ensure that academic competencies and requirements are being met before students are permitted to leave campus for paid employment.

Foster a Less Insular Perspective

These case studies suggest that the fear many harbor in Kentucky, that is, that young people will continue to leave the state, never to return, may give rise to potentially destructive cultural messages. These messages circumscribe the lives of many young people, limit their exposure to opportunities, and, for some, provide the very impetus that causes them to do what was most feared—leave. Today, for those who never or seldom look beyond the region or even the county where they were born, the economic and social consequences could be devastating. Even a commitment to place must be strengthened by knowledge of the larger economy, the social changes underway, and the myriad ways in which they will inevitably affect all of us, regardless of where we live. Clearly, the larger world has opportunities to offer that we can import to the places where we would, in an ideal world, choose to be. By passively fostering an insular world view, that is, failing to encourage vision beyond one's own immediate world, we ultimately inhibit the capabilities of young people.

Alternatively, exposure to new ideas, opportunities, and places helps foster the confidence young people need to take on the challenges of education, training, entrepreneurship, and achievement. For youth whose parents are poor or undereducated, exposure to a college campus or a museum or an arts event can open the door to possibilities that would otherwise remain unknown. For every story of the gifted Kentuckians who have left the state for other places that offered them greater opportunity, we have the stories like those of engineer-turned-inventor-entrepreneur and now university president, Lee Todd, world-renowned author Bobbie Ann Mason, software engineer Allen Haas, and literally thousands of other gifted people and accomplished professionals who consciously chose to return to their home state, improve its circumstances, help its economy and its people, and celebrate its culture.

For each of the talented Kentuckians who excelled, each of us has our own stories of classmates who had the ability to achieve considerable success but were subtly trained to believe they could not achieve, they could not “get above their raisin’s.” They followed their fathers and mothers into factories, mines, steel mills, department stores, clerical pools, and other places that will never begin to tap their considerable gifts. Similarly, as we found in interviews for these case studies, girls still consistently envision themselves in classically female roles, in professions that have historically been vitally important to society but consistently undervalued. In our lifetimes, hundreds of thousands of similar stories will accumulate in our state. As University of Kentucky Presi-

dent Lee Todd has suggested, the subtle, potentially destructive, and circumscribing cultural messages that discourage achievement must be countered vigorously if we are to lift our state to new economic heights and educate more of our very capable citizens.

Were more of us to adopt a new perspective, one that values knowledge of the world around us, one that celebrates the opportunities we can build by exposing young people to the virtually unlimited possibilities that education and training offer them, more of our best and brightest would likely return to the place that first opened these doors of knowledge for them. Indeed, these case studies suggest that our gravest cultural error here may be that of holding too tightly to what we most want to keep, the promise of our youth.

Appendix A

Regression Estimates and Predicted College-Going Rates

By Michael T. Childress

We used multiple regression analysis to generate the predicted college-going rates for the 233 Kentucky high schools in our sample. The model is based on several factors that studies have shown are linked to student performance and/or college attendance. The variables in the model include:

College-Going Rate (COL). The dependent variable is the percentage of the high school graduating class going to college. The data are from Kentucky Department of Education's report, "Transition to Adult Life." We collected our data from the 1999-2000 school report cards. The state average reported for this year is 53 percent.

Education (BA). Using data from the 1990 Census, we included the percentage of the adult population (25 years old and older) with a B.A. or higher for the zip code in which the high school is located. If the high school was the only one in the county or if it included students from around the county, then we used the county B.A. percentage.

Socioeconomic Status (LUNCH). We use Kentucky Department of Education data on the percentage of the students who receive free or reduced priced lunch as a proxy for socioeconomic status.

School Size (ENROLL99). Some literature indicates that the size of the school is linked to student performance, with smaller schools associated with better student outcomes. We used the enrollment numbers included on the 1999-2000 school report cards to gauge the impact on the college-going rate.

Spending per Student (SCHSPND). Education researchers generally agree that spending influences student performance. More money can mean smaller class sizes and more qualified teachers. This variable comes from the 1999-2000 school report cards.

Teacher Experience (TEXPAVG). A significant amount of research has shown that teacher qualifications affect student achievement. One indicator of teacher experience is the number of years teaching, data that is included on the school report cards.

Proximity to an Institution of Higher Education (COPSE). We included this variable to test the relationship between the proximity of an institution of postsecondary education and a high school. This variable is coded as a dichotomous variable. If there is an institution of postsecondary education in the same county as the high school, then the variable is coded as a “1.” Otherwise, COPSE is coded “0.”

Unemployment Rate (NOV99UMP). We included the county unemployment rate for the fall following graduation to determine how employment opportunities relate to the college-going rate. The data are from the Kentucky Department for Employment Services.

Parental Involvement (NPT_CONF). This variable is a measurement of the number of students whose parent/guardian had at least one teacher conference during the school year and comes from the school report cards. We have transformed the variable so that it is the *percentage* of students who satisfy this criterion. (Note: We truncated the variable so the maximum value is 100 percent.)

Performance on Standardized Tests (ZTESTS). Student achievement is linked to postsecondary education attendance. We converted three Kentucky Core Content test scores and one national basic skills test score into z-scores and then averaged them to get a single z-score. The four tests are 9th-grade language, 10th-grade reading, 11th-grade math, and 12th-grade writing. The data are from the school report cards.

Location of the school. We use a series of dichotomous variables (i.e., coded “0” or “1”) based on the USDA BEALE codes to reflect the relative urban to rural nature of the county. Counties with a BEALE code of “0” through “7” are included in the model while the completely rural counties are excluded; the completely rural counties have BEALE codes of “8” or “9.”

We use the parameter estimates in Table A.1 to calculate a predicted (or expected) college-going rate for a high school. The formula for calculating these rates is:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 \\ + \beta_{10} X_{10} + \beta_{11} X_{11} + \beta_{12} X_{12} + \beta_{13} X_{13} + \beta_{14} X_{14} + \beta_{15} X_{15} + \beta_{16} X_{16} + \beta_{17} X_{17}$$

Where,

Y = the predicted college-going rate

a = intercept

$\beta_1 X_1$ = BA coefficient *times* the percentage of the adult population 25 years old and older with a BA degree or higher.

$\beta_2 X_2$ = LUNCH coefficient *times* the percentage of students in the school receiving free or reduced priced lunches.

$\beta_3 X_3$ = ENROLL99 coefficient *times* the school's total enrollment.

$\beta_4 X_4$ = SCHSPND coefficient *times* the spending per student at the school.

$\beta_5 X_5$ = TEXPAVG coefficient *times* the average years of experience among the school's teachers.

$\beta_6 X_6$ = COPSE coefficient *times* whether there is an institution of postsecondary education in the county (coded "1" if yes and "0" if no).

$\beta_7 X_7$ = NOV99UMP coefficient *times* the county's unemployment rate in November 1999.

$\beta_8 X_8$ = NPT_CONF coefficient *times* the percentage of the students whose parent/guardian had at least one teacher conference.

$\beta_9 X_9$ = ZTESTS coefficient *times* the normalized and averaged scores on the four different Kentucky core content tests.

$\beta_{10} X_{10}$ = BEALE0 coefficient *times* whether the county has a BEALE code of "0" (This variable equals "1" if yes and "0" if no.)

$\beta_{11} X_{11}$ = BEALE1 coefficient *times* whether the county has a BEALE code of "1" (This variable equals "1" if yes and "0" if no.)

$\beta_{12} X_{12}$ = BEALE2 coefficient *times* whether the county has a BEALE code of "2" (This variable equals "1" if yes and "0" if no.)

$\beta_{13} X_{13}$ = BEALE3 coefficient *times* whether the county has a BEALE code of "3" (This variable equals "1" if yes and "0" if no.)

$\beta_{14} X_{14}$ = BEALE4 coefficient *times* whether the county has a BEALE code of "4" (This variable equals "1" if yes and "0" if no.)

$\beta_{15} X_{15}$ = BEALE5 coefficient *times* whether the county has a BEALE code of "5" (This variable equals "1" if yes and "0" if no.)

$\beta_{16} X_{16}$ = BEALE6 coefficient *times* whether the county has a BEALE code of "6" (This variable equals "1" if yes and "0" if no.)

$\beta_{17} X_{17}$ = BEALE7 coefficient *times* whether the county has a BEALE code of "7" (This variable equals "1" if yes and "0" if no.)

The model coefficients are presented in Table A.1. This model explains 59 percent of the variation in the dependent variable (adjusted r-squared equals 0.59).

Table A.1
Model Estimates

Variable	Parameter Estimate	S.E.	T	Sig.
INTERCEPT	32.8516	6.816	4.82	<.0001
BA	0.7299	0.11301	6.46	<.0001
LUNCH	-0.1319	0.06552	-2.01	0.0454
ENROLL99	-0.0045	0.00211	-2.12	0.0348
SCHSPND	0.000142	0.000855	0.17	0.8679
TEXPAVG	0.5074	0.33969	1.49	0.1368
COPSE	4.85607	1.9081	2.54	0.0117
NOV99UMP	1.33868	0.35775	3.74	0.0002
NPT_CONF	0.04464	0.03067	1.46	0.1471
ZTESTS	8.13005	1.22137	6.66	<.0001
BEALE0	-9.10183	3.62312	-2.51	0.0128
BEALE1	2.69016	5.32913	0.5	0.6143
BEALE2	1.41213	3.25699	0.43	0.6651
BEALE3	3.30263	5.35804	0.62	0.5383
BEALE4	-1.85185	5.03109	-0.37	0.7132
BEALE5	-1.75955	4.74613	-0.37	0.7112
BEALE6	1.2045	2.82448	0.43	0.6702
BEALE7	2.6905	2.2861	1.18	0.2406

Appendix B

Teacher Transcript Analysis

By Billie M. Sebastian, Corrie Orthober, Tom Hampton, and Suzanne King

Based on the method described in Appendix A, we used the multiple regression analysis to predict college-going rates for 233 Kentucky high schools. We then subtracted the predicted rates from the actual rates to identify schools that were *underperforming* or *overperforming*; a negative number indicates the school is underperforming while a positive number suggests that the school is overperforming.

The Kentucky Educational Professional Standards Board provided us with the academic transcripts of teachers from the 10 schools with the largest negative residuals and the 10 with the largest positive residuals. We analyzed these transcripts to identify differences in the backgrounds of these teachers. Our purpose was to determine if differences between the two groups of teachers would help explain the performance of these schools. In the sections that follow we provide summary data about the schools and the teachers.

The Schools

Table B.1 compares the entire sample of high schools to the 10 worst underperforming schools and the 10 best overperforming schools. The variables of comparison are explained in Appendix A. Table B.1 shows that the average actual college-going rate for the 10 underperforming schools is 22.1 percent, which is significantly lower than their average predicted college-going rate of 36.6 percent. On the other hand, the average actual college-going rate for the 10 overperforming schools is 62.2 percent, which is significantly higher than their predicted college-going rate of 42.1 percent.

Table B.1
Summary Data (Averages) on High Schools

	Entire Sample (233 High Schools)	10 Worst Underperformers	10 Best Overperformers
Actual College-Going Rate (COL)	51.3%	22.1%	62.2%
Predicted COL	51.3%	38.6%	42.1%
BA	11.7%	8.1%	9.8%
LUNCH	40%	49.6%	51.7%
ENROLL99	817	724	786
SCHSPND	\$4,311	\$4,463	\$4,407
TEXPAVG	12.9	12.6	12.3
COPSE	58%	50%	60%
NOV99UMP	4.5%	3.8%	4.2%
NPT_CONF	44%	30%	47%
CTBS, 9th Grade Language	46.8	37.2	41.5
KY Core Content Test, 10th Grade Reading	66.5	60.1	62.5
KY Core Content Test, 11th Grade Math	65.7	54.9	57.8
KY Core Content Test, 12th Grade Writing	55.9	53.5	50
Metro County (BEALE code equals 0, 1, 2, or 3)	33%	50%	50%

The Teachers

We collected three types of data from the teacher transcripts: grade-point averages; high schools attended; and rank.¹ We examined the transcripts of 456 teachers from the 10 worst underperforming schools and 501 teachers from the 10 best overperforming schools. However, there is virtually no difference between the two groups when comparing these variables. We believe this highlights the importance of other, perhaps intangible factors, in accounting for the differences between the underperformers and overperformers.


¹ A Rank III teacher is someone who has obtained a college degree or its equivalent from an approved four-year institution. A Rank II teacher has accumulated at least 30 hours of graduate work, which may include a master's degree, or the equivalent continuing education. A Rank I teacher has earned at least 30 hours of graduate work or the equivalent continuing education beyond Rank II and in a subject field approved by the Educational Professional Standards Board, or has met requirements for Rank II and also holds current certification from the National Board for Professional Teaching Standards.


Table B.2
Summary Data from Teacher Transcript Analysis


		10 Worst Underperformers	10 Best Overperformers
Undergraduate Grade-Point Average (Mean/Median)		2.99 / 2.97 (365)	3.02 / 2.96 (375)
Graduate Grade-Point Average (Mean/Median)		3.72 / 3.69 (391)	3.63 / 3.67 (416)
Where did the teacher attend high school?	Same High School	23% (76)	24% (80)
	Different School, but Same County	23% (74)	17% (55)
	In an Adjacent County	15% (50)	14% (46)
	Region (no more than 2 counties away)	6% (20)	8% (26)
	Other (3 or more counties or out-of-state)	32% (105)	36% (117)
	GED	1% (2)	1% (4)
Rank I		33% (150)	29% (142)
Rank II		39% (175)	44% (217)
Rank III		28% (126)	27% (135)
<i>Note: The numbers in parentheses show the number of teacher transcripts included for that factor.</i>			


Selected Publications and Products from the


KENTUCKY
LONG-TERM POLICY RESEARCH CENTER


 **8 Financing State and Local Government: Future Challenges and Opportunities** (2001) A collection of articles by leading experts who examine current tax policy, its impact on revenues, and the pressures for change. The authors discuss the ideal tax system, as well as the real course of tax reform in recent years. Further, articles examine the adequacy, fairness, competitiveness, balance, and future viability of the current system. Includes a CD-ROM with related articles and reports and videotaped interviews and presentations.


 **Talking Back: Kentucky High School Students and Their Future Education Plans** (2001) A report on findings from a 2000 survey of Kentucky high school students about their plans for postsecondary education.


 **Policy Notes** (2001) Short takes—just two pages—on tall subjects, from statewide survey findings to trends in other states, from how school technology investments may be paying off for Kentucky to how other states are covering prescription drug costs for elders. Available electronically or by mail.


 **8 Purpose, Publications, and Products 2001** (2001) A guide to the Center's work, including a subject index to its reports and a comprehensive CD-ROM that features 43 videotaped interviews with some of Kentucky's most forward-looking citizens.


 **Education and the Common Good** (2001) A cost-benefit analysis of some rarely considered social benefits Kentucky realizes from an educated populace.


 **The Conference Proceedings: Kentucky and the New Economy & Challenges for the New Century** (2001) Gavel-to-gavel presentations and discussions from the Center's seventh annual conference in northern Kentucky.


 **Challenges for the New Century** (2000) Now in its second printing, the Center's fourth biennial trends report revisits the major trends that are influencing the Commonwealth's future.


 **Measures and Milestones 2000** (2000) Part of the Visioning Kentucky's Future project, a progress report on 26 long-term goals for the future. Includes results of a statewide citizen survey.


 **Collecting Taxes in the Cyberage** (1999) An assessment of the likely fiscal impact of online retailing on state revenue.


 **What Next for Kentucky Health Care?** (1999) New approaches to closing the widening gaps in access to health care.


 **Child Care in Kentucky** (1999) An examination of the quality of child care in Kentucky and five cost scenarios for improvements.


 **The Future Well-Being of Women in Kentucky** (1999) A collection of articles on issues of importance to Kentucky women.


 **Kentucky's Teachers: Charting a Course for KERA's Second Decade** (1999) An examination of progress toward the KERA goal to improve teacher quality in the Commonwealth.


 **The Leadership Challenge Ahead** (1998) The third biennial trends report with a CD-ROM that includes Center reports, the budget game, and key interviews.


 **Civil Society in Kentucky** (1998) An analysis of ties that bind us and a directory of 156 small-scale civic projects in the state.


 **Entrepreneurs and Small Business—Kentucky's Neglected Natural Resource** (1998) A report on the rising importance of entrepreneurship to development and Kentucky's capacity to grow from within. Includes results of five surveys.


 **Measures and Milestones** (1998) Part of the Visioning Kentucky's Future project, a progress report on 26 long-term goals for the future. Includes results of a statewide citizen survey.


 **The Circuits Come to Town** (1997) A report on technology use and public readiness for online government services.


 **The Kentucky State Budget Game** (1997) An interactive learning tool, this computer game puts players, students and interested citizens alike, in the seat of power. They make tough policy choices, balance the budget, and watch public support rise and fall. Download from our website or order on diskette.


 **Visioning Kentucky's Future** (1996). Results of a ground-breaking effort to capture the ideas of citizens in a vision for the future of the Commonwealth, goals for realizing it, and benchmarks for measuring our progress.


 **\$5.8 Billion and Change** (1996) An analysis of alternative future budgetary scenarios, driven by key trends influencing the state's future.

 **Choosing Prosperity: Maximizing Returns on Public Investment in Workforce Development** (1996) Cost-effective strategies for meeting workers and workplace needs.

 **Reclaiming Community, Reckoning with Change** (1995) A report on the transformational potential of broad civic engagement and community-based development.

 **Farms, Factories and Free Trade** (1995) An in-depth look at global prospects for rural industries and strategies for success.

 **The Context of Change** (1994). The Center's first biennial trends report on the trends influencing the Commonwealth's future.

 **The Future of Burley Tobacco: Potential Outcomes, Points of Leverage and Policy Recommendations** (1994). A quantitative analysis of factors that are likely to influence the market for burley tobacco and, in turn, the livelihoods of Kentucky tobacco farmers over the next decade.

Write, call or e-mail the Center to receive your free copy of any available report at the address or number on page v of this report.

All reports are available electronically at:

www.kltprc.net